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# HUGHES LIVESTOCK COMPANY/ DIPPING VAT COULEE Acquisition

A Proposal by the  
Montana Department of Fish, Wildlife & Parks  
1999

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#### *Included In This Document:*

- \* **Environmental Assessment**
- \* **Management Plan**
- \* **Socio-Economic Assessment**





# Montana Fish, Wildlife & Parks

4600 Giant Springs Road  
Great Falls, Montana 59405

June 28, 1999

To Whom It May Concern,

The Montana Fish, Wildlife & Parks Department (MFWP) is proposing a fee title purchase of a tract of land from the Hughes Livestock Company for \$1,137,660.90. The Dipping Vat Coulee tract is 2,143 acres in size. The property is located about 10 miles southwest of Utica and is an inholding on the eastern edge of the Judith River Wildlife Management Area.

This acquisition is being proposed to protect key wintering habitat for elk, mule deer, and other wildlife. The acquisition will allow the property to be managed for wildlife in perpetuity.

Enclosed is an Environmental Assessment, Preliminary Management Plan, Socio-Economic Report, and other related information for your review. The comment period will be open through July 29, 1999.

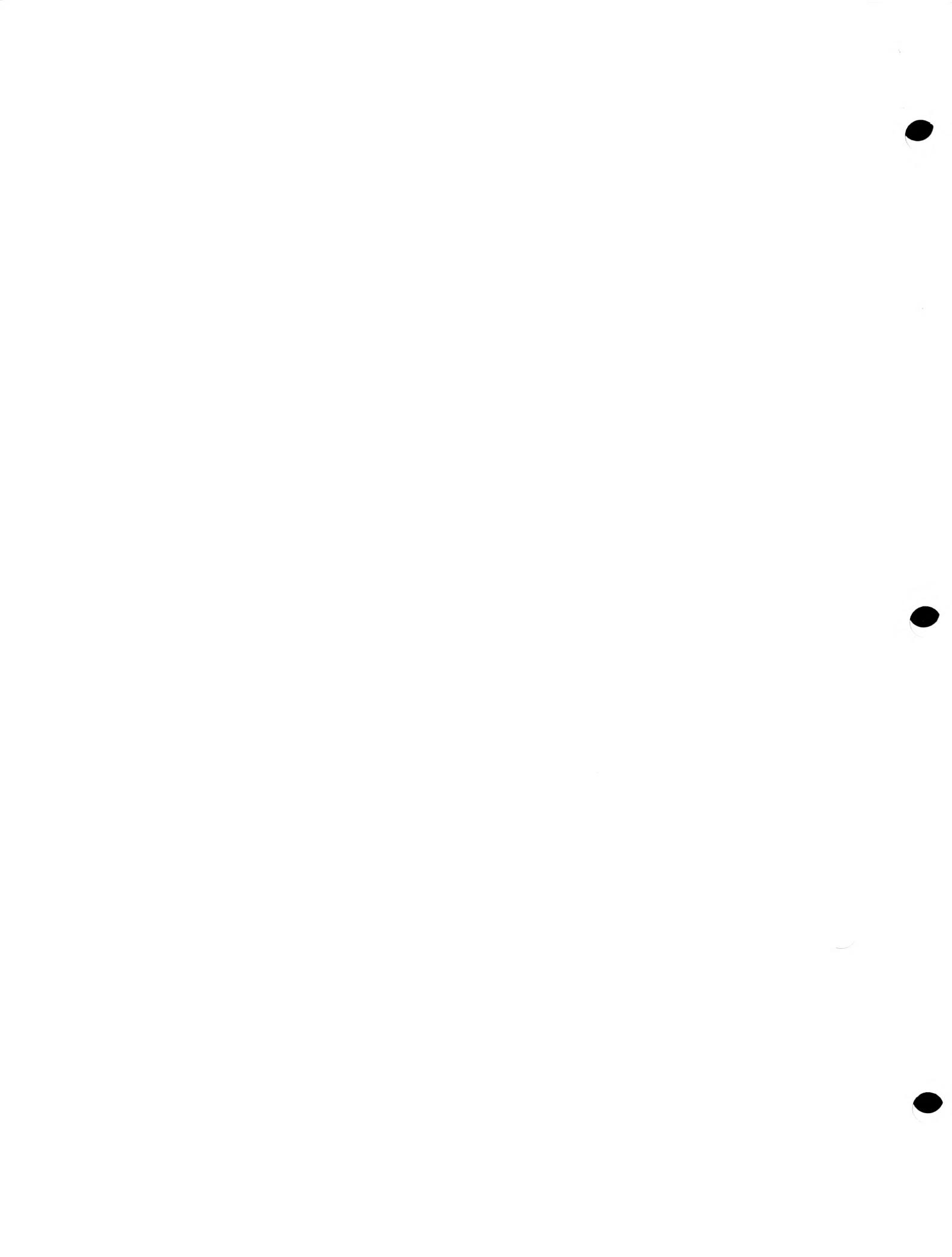
Please send any written comments to the following address:

Montana Fish, Wildlife & Parks  
Attn: Hughes Livestock Company Land Acquisition  
4600 Giant Springs Road  
Great Falls, Montana 59405

A public hearing on this proposed acquisition will be held at City Hall in Stanford, Montana on 22 July 1999 at 7 p.m.

Sincerely,

Mike Aderhold  
R4 Regional Supervisor



**Montana Department of Fish, Wildlife & Parks  
Wildlife Division**

**Draft Environmental Assessment**

**HUGHES LIVESTOCK COMPANY/DIPPING VAT COULEE  
PROPOSED ACQUISITION**

**I. INTRODUCTION**

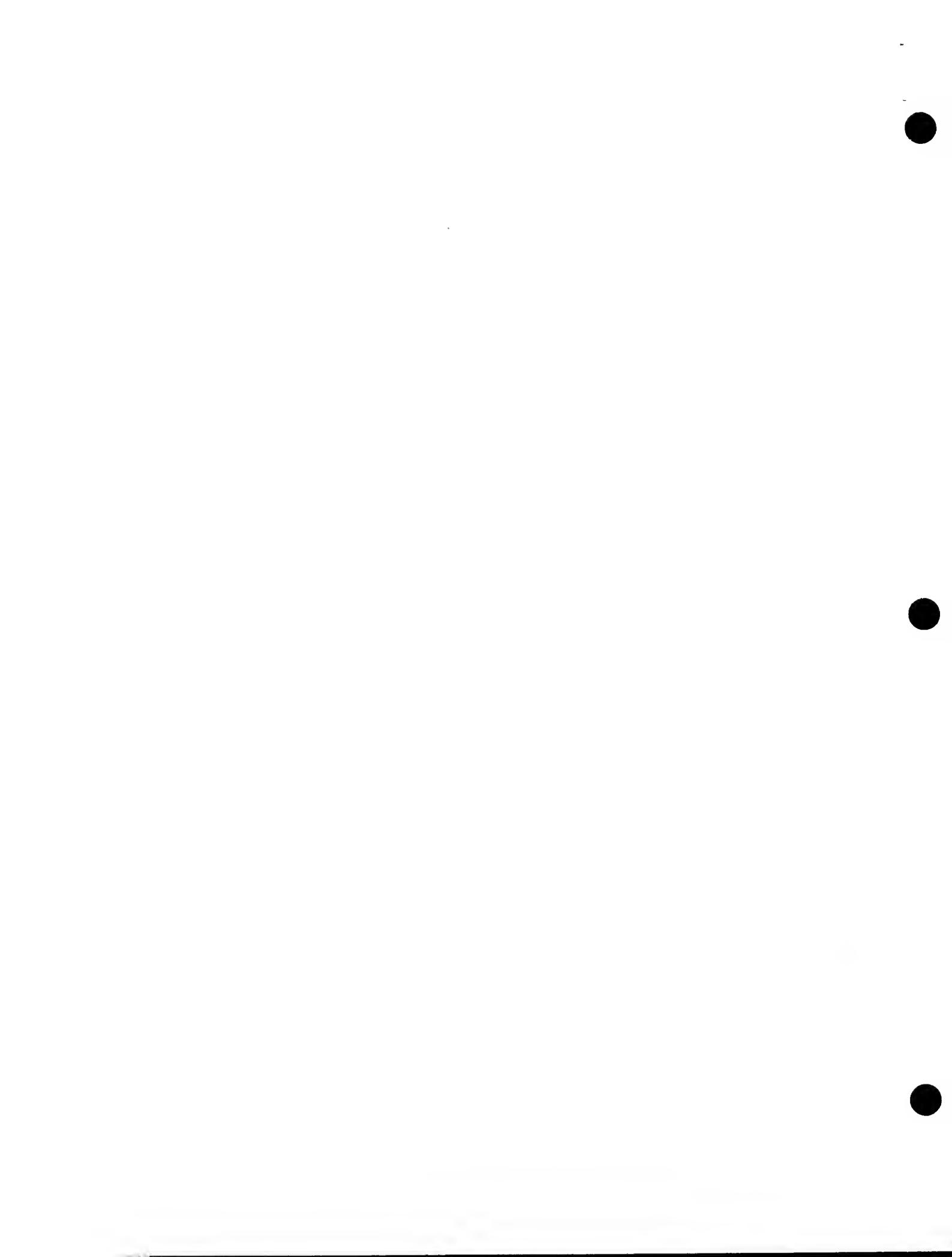
The state of Montana recognizes certain native plant communities constituting wildlife habitat are worthy of perpetual conservation. Those communities include riparian, sagebrush-grassland, and intermountain grassland. It has been determined that the Dipping Vat Coulee property, owned by the Hughes Livestock Company, is extremely important wildlife habitat and warrants such consideration. Fee title acquisition of the property was offered to the Montana Department of Fish, Wildlife & Parks (MFWP) by Hughes Livestock Company in April, 1996. The MFWP Region Four Supervisor submitted a formal project proposal to Wildlife Division and Field Services Administrators in May, 1996. The Fish, Wildlife & Parks Commission reviewed the proposal and directed the Department to pursue the acquisition at their June 26, 1996 meeting.

**II. AUTHORITY AND DIRECTION**

MFWP is authorized by statute (87-1-201) to protect, enhance and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. In 1987, the Montana Legislature passed HB526 which earmarked hunting license revenues to secure wildlife habitat through lease, conservation easement, or fee title acquisition (87-1-241 and 242). This is now referred to as the Habitat Montana Program. The Fish, Wildlife & Parks Commission and in most cases the State Land Board must approve any acquisition of land proposed by the agency. This Environmental Assessment is part of the decision making process.

**III. LOCATION OF PROJECT and PHYSIOGRAPHIC CHARACTERISTICS**

The proposal area consists of a 2,143.13 acre inholding on the eastern edge of the Judith River Wildlife Management Area (JRWMA). The JRWMA is located adjacent to the east-central edge of the Little Belt Mountains and the Lewis and Clark National Forest in Judith Basin County; approximately 60 air miles southeast of Great Falls, 40



miles southwest of Lewistown, and 10 miles southwest of Utica (see map Appendix I). Elevations range from 5,005 to 5,945 feet. The property is classified as a mountain foothill type consisting of gentle slopes, ridges, and benches, with both live and intermittent stream courses. Soils are generally light and shallow, underlain by a limestone matrix. Annual precipitation ranges from 12 to 18 inches, most of which falls from March through June. Snowfall is generally moderate and is accompanied by strong southwest winds. Chinook-type conditions are common during the winter period. The mean high and low temperatures are 52.8 and 23.1 degrees Fahrenheit, respectively. The average frost free period is 95 days.

Legal description of the proposed project property:

County: Judith Basin

Township 13 North; Range 11 East:

Section 1 = 317.99 acres  
Section 2 = 623.34 acres  
Section 3 = 120.00 acres  
Section 10 = 160.00 acres  
Section 11 = 360.00 acres  
Section 12 = 241.80 acres

Township 14 North; Range 11 East:

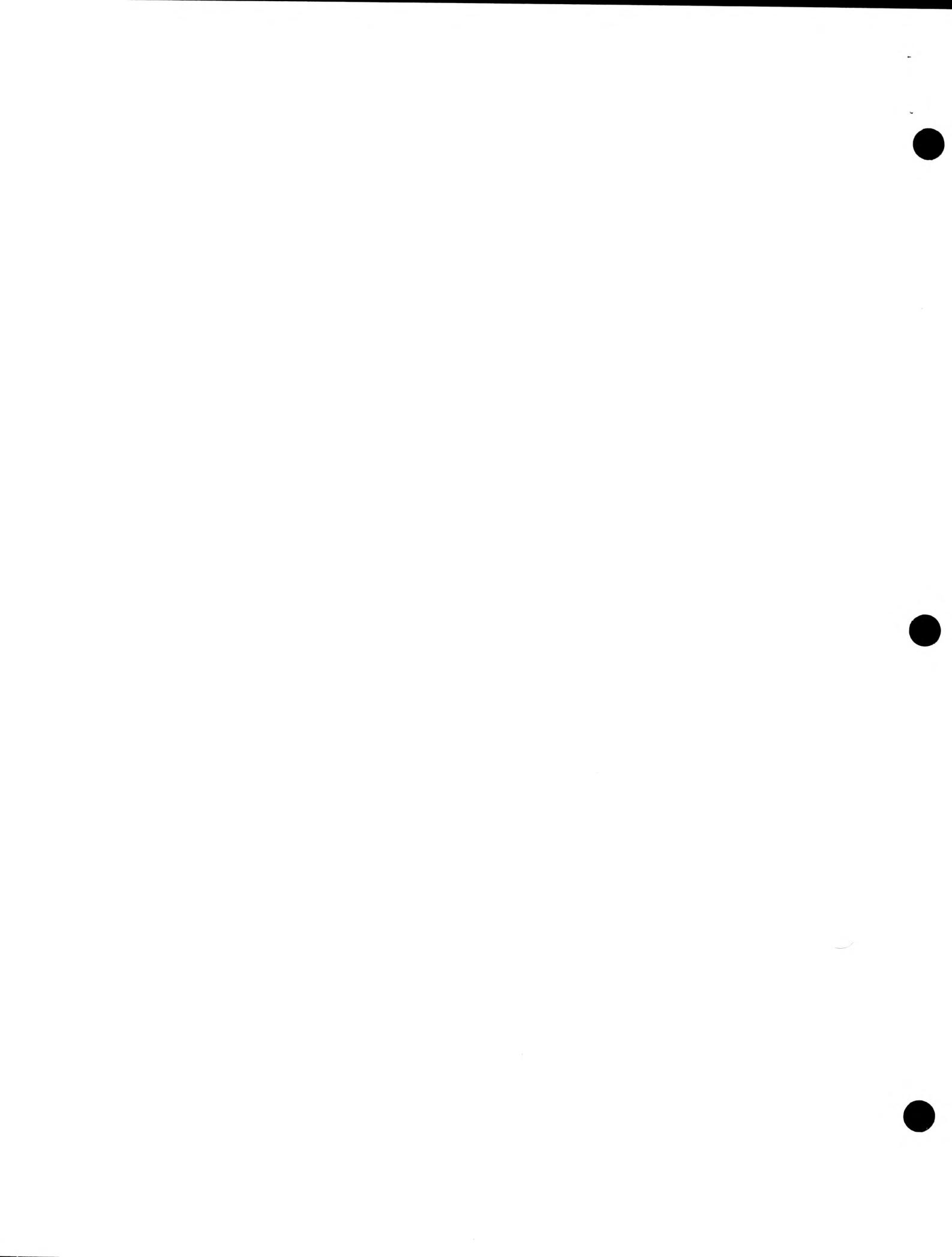
Section 34 = 40.00 acres  
Section 35 = 280.00 acres

Total Deeded = 2143.13 acres

The accompanying map (Appendix I) displays ownership of all lands affected by the proposal, the project site, and property boundaries. The project's exterior boundary is 10 miles in length and is surrounded by approximately 8.25 miles or 82.5 percent of its total boundary by a portion of the JRWMA property. The project property is classified as an inholding in relation to the JRWMA. The remainder of the boundary is bordered by 2 adjacent ranch ownerships on the east side and a 10 acre privately owned subdivision tract on the west boundary.

#### **IV. PURPOSE AND NEED FOR THE PROJECT**

The proposal area is identified as Intermountain Grassland Habitat relative to the Habitat Montana classification of important and/or threatened habitats in Montana.



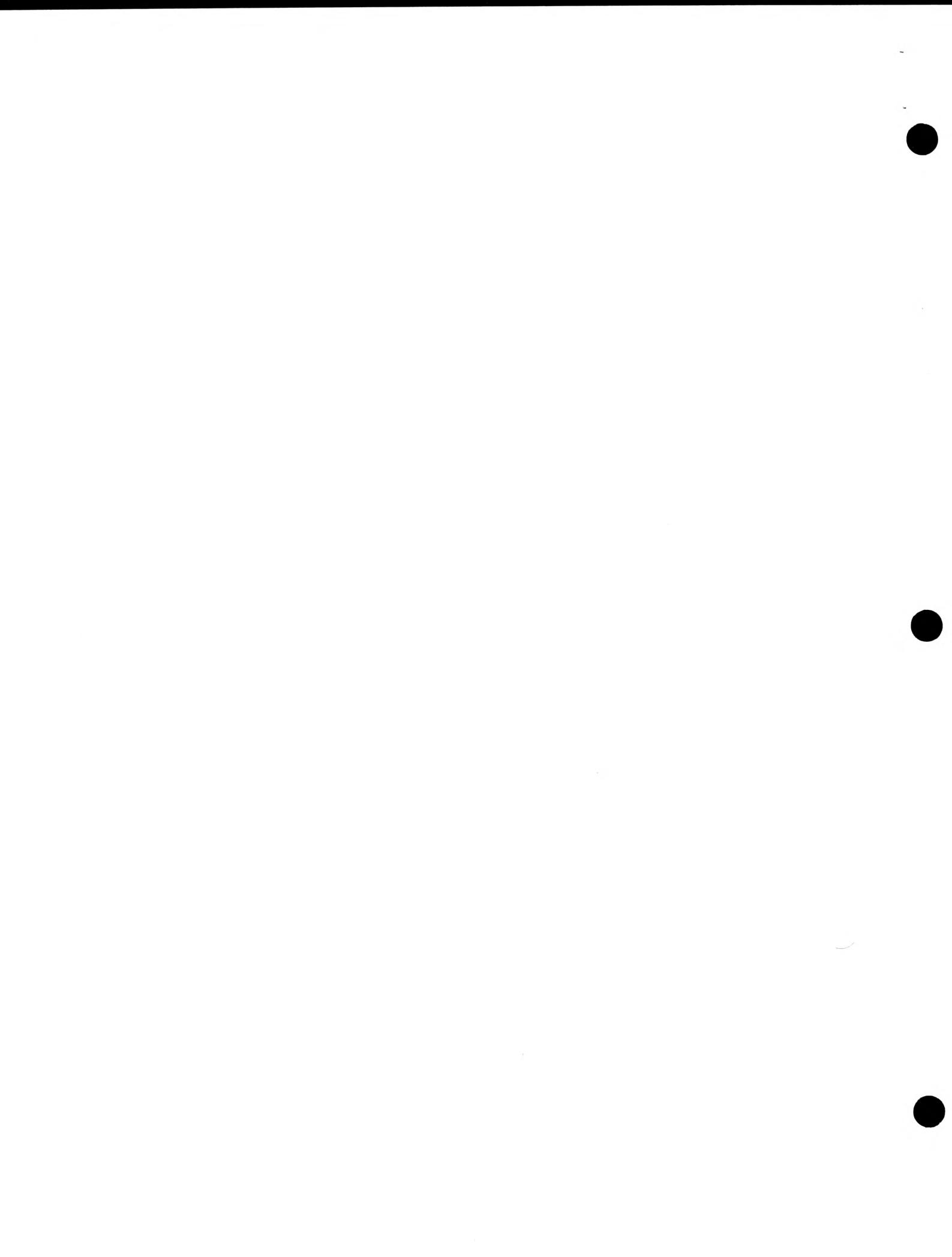
Vegetation types are quite diverse. They consist of mountain footslope grassland/timber, grassland benches, dry grassland drainage basins, and spring fed riparian/grassland drainages. The primary value is critical winter/spring habitat for a portion of the JRWMA elk herd. Secondary values include mule deer winter range; white-tailed deer and pronghorn yearlong habitat; upland bird habitat; and approximately one mile of spring fed streams that supply a ½ acre, man-made pond. An additional man-made pond that collects run-off water is also located on the property. These same vegetation types are utilized by a diverse group of small mammals and birds. A list of wildlife species potentially using this area is contained in Appendix II.

The Sapphire Village subdivision is approximately one mile southeast of the property and is occupied by yearlong and seasonal residents. Subdivision potential for the proposal property is rated as high. The close proximity of the JRWMA, the Lewis and Clark National Forest and associated abundant wildlife and recreation opportunities make the property highly attractive and sought after for subdivision.

The property is classified as an inholding in relation to the 7,696 acre JRWMA; therefore, the land will be incorporated into the existing WMA and managed according to the goals, objectives, and strategies set forth in the management plan. The wildlife habitat objective for the property will be to increase carrying capacity for wintering big game; primarily elk. Summer livestock grazing, prescribed burning, and other vegetative treatments (e.g., interseeding, chemical fallowing, hay cutting, etc.) will be used to treat vegetation when necessary to enhance and maintain wildlife habitat.

The Judith River elk herd component of the Little Belt Mountains' elk population is vital for maintaining the present level of elk hunting recreation opportunity in central Montana. Currently, the Department owns/controls about 25 percent of the winter range for the 900-1,200 elk (observed number) wintering in the upper Judith River drainage area. Some Judith River area landowners have little tolerance for elk and have expressed concern in the past regarding elk usage of their properties. Other landowners in the general area lease their land to outfitters, outfit on their own, or have established fee hunting arrangements; consequently, they are reasonably tolerant of the elk. Those management strategies greatly affect the distribution and thus the availability of elk for the general hunting public.

The proposal property has historically provided important and critical winter/spring elk habitat. Furthermore, it provides a broad movement corridor between the JRWMA and Reed Hill, which also contributes to an important component of the traditional elk winter/spring habitat. Because of the inholding position/situation relative to the JRWMA, the proposed acquisition will consolidate Department ownership. The result of this will be that most of the "key" elk winter range habitat in the area will be managed for wildlife in perpetuity.



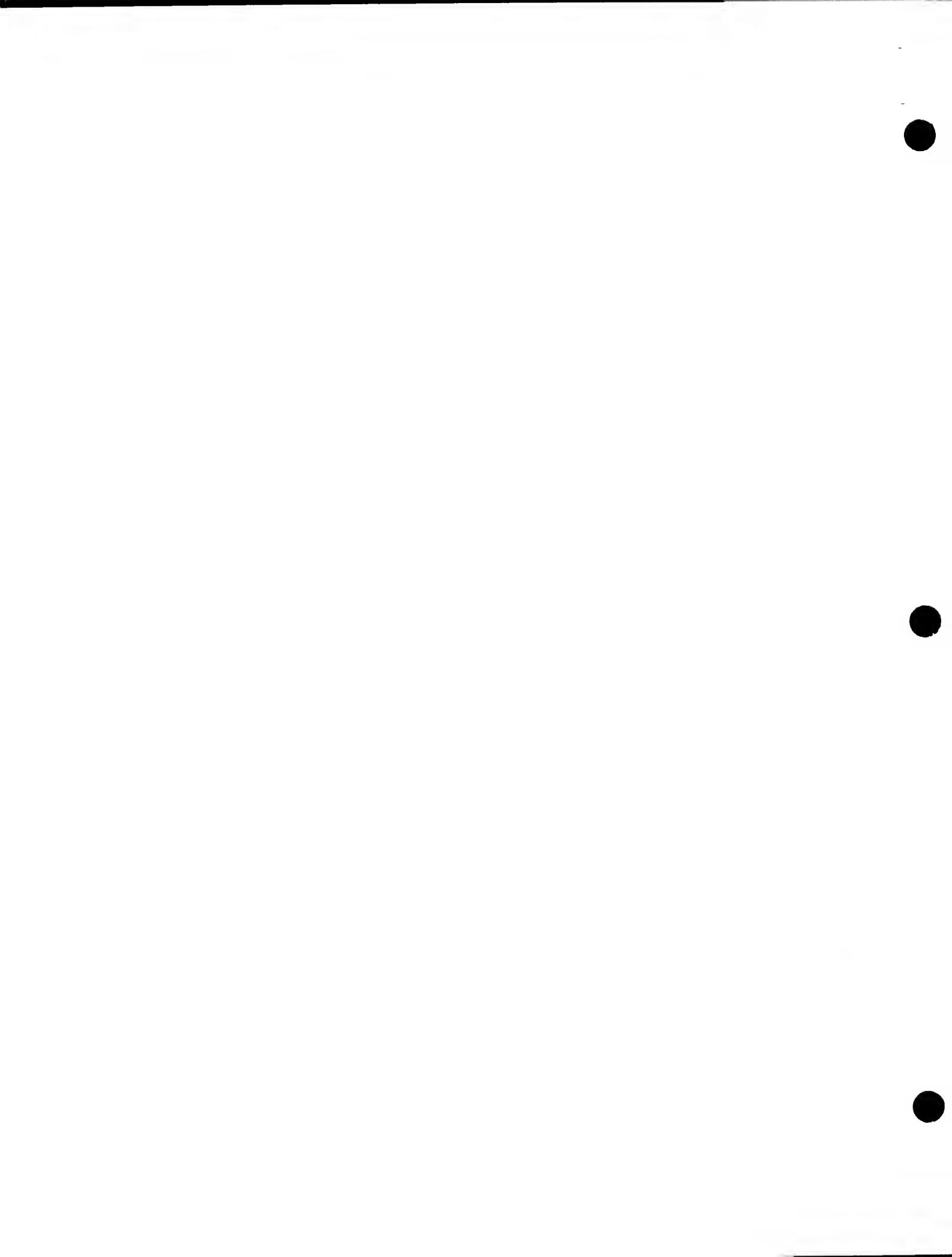
This acquisition is essential at the statewide level to the extent that the elk population under consideration is an important component of the state's elk resource. The MFWP strategic plan states, "The long-term future of elk depends on: (1) public control of additional key habitats; (2) protection of elk habitat as land uses intensify; (3) increased public support and funding to protect necessary lands; (4) addressing private landowner tolerances; and (5) optimum use of available harvestable supplies of elk in some areas while limiting hunting in others to improve the quality of elk harvested." This proposal offers an ideal opportunity to implement these strategies in their entirety with a willing and concerned seller.

The Little Belt Mountains provide approximately 45,000 hunter days of elk hunting recreation annually. During a typical hunting season, the Little Belts provide recreation to approximately 47 percent of the elk hunters, 41 percent of the hunter days, and 32 percent of the elk harvest in MFWP's Region 4.

Reductions in elk availability and/or population sizes due to expanding land closures for commercialization of the elk resource or land development could mean a loss of up to 10,000 hunter days and 250 harvested elk on an annual basis. The stated objective for the Little Belt-Castle Mountains Elk Management Unit Plan is to maintain elk related recreational opportunity at current levels.

Loss of/or impact on habitat is a major concern addressed by this proposal. If the Department does not obtain the land, it could be sold to developers and ultimately subdivided. If this event occurs, valuable access to public land and elk winter range will be permanently lost. Department ownership and management of this property will allow for the maintenance of critical habitat with increased elk carrying capacity and hunter opportunity.

The 2,500 acre area of the JRWMA south of the county road is bisected by a mining company's 500 acre deeded inholding. Sapphire production has ceased and the majority of the deep mining trench has been recently filled and reclaimed. The mining strip of land is accessible via county road and undoubtedly has high subdivision potential. When development occurs, much of the south side JRWMA will likely become unsuitable for wintering elk. This fact mandates the Department should obtain additional lands to the north in order to secure the future for the local elk herd and associated recreation opportunities.



## V. SCOPE FOR THE PROJECT

### Conserve and enhance land, water, and wildlife:

(1) The proposal area contains 2,143.13 acres. It will be managed in perpetuity to enhance soils, water, vegetation, and wildlife species' habitats for the benefit of the general public.

(2) Wildlife species of major interest are: elk, mule deer, pronghorn, white-tailed deer, bear, mountain lion, upland game birds, songbirds, raptors, bats, and other wildlife species associated with the diverse array of habitats.

(3) Current habitat condition:

Fair to good, according to historic livestock grazing patterns. Areas near water sources are heavily utilized and are rated in fair condition. Vegetation condition improves significantly as distance increases away from water supplies. Overall, approximately 50 percent of the vegetation condition, species composition, and general habitat is in good condition.

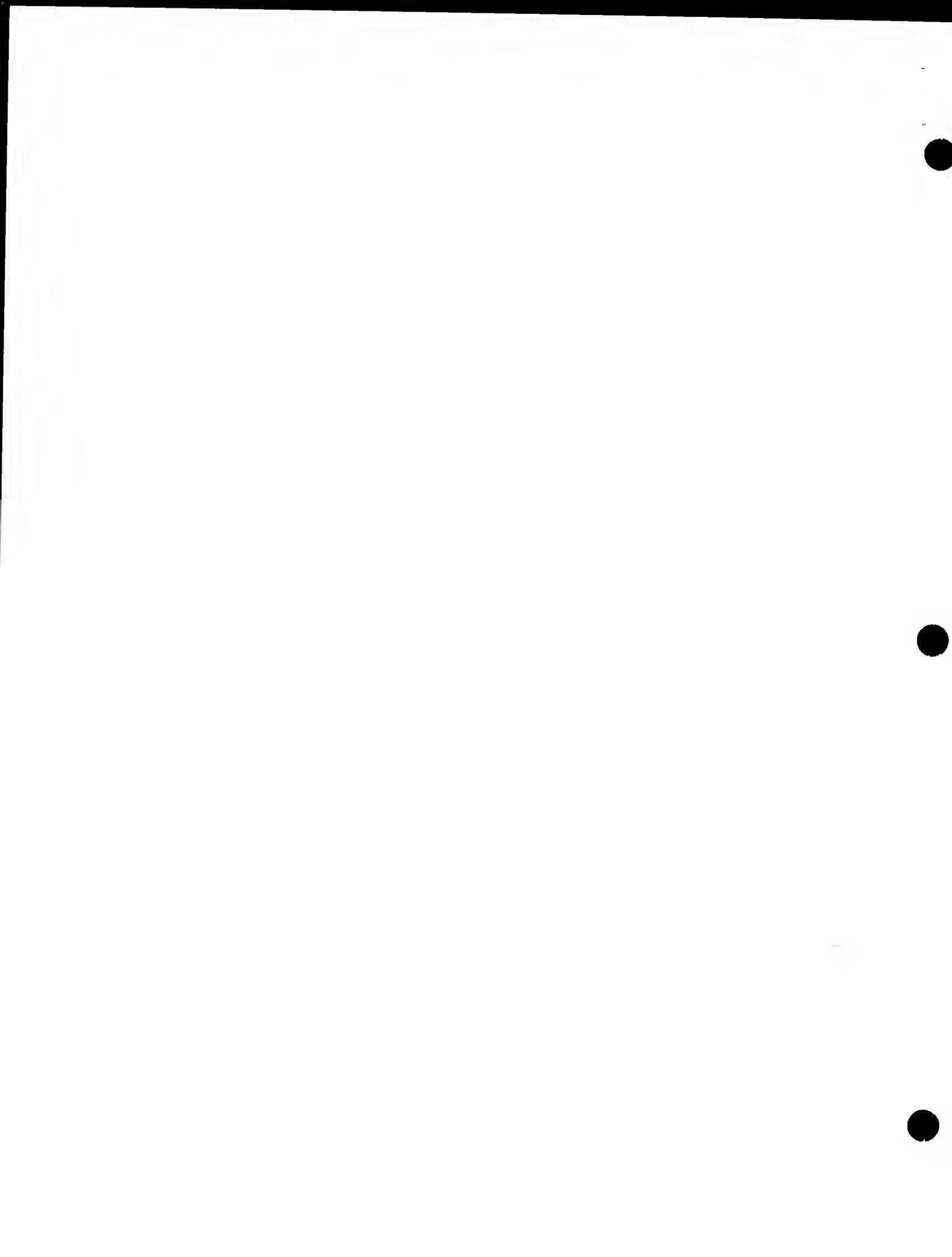
(4) Important game population estimates:

The upper portions of the Judith River drainage winters an elk herd of approximately 900-1,200 counted animals, normally segregated into 3 separate herd segments during the winter period. The elk herd segment associated with the Judith River WMA and adjacent private lands to the north and east, including the proposal area, is comprised of 800-1,100 animals.

Other species of big game are: mule deer, pronghorn, white-tailed deer, black bear, and mountain lion. Mule deer are the most abundant of these species, with approximately 150-250 present on and near the JRWMA during the winter period (mainly Reed Hill).

### Contribute to hunting and fishing opportunity:

(1) The proposal area is accessible to the general public via the JRWMA property and across adjacent private land currently in the MFWP Block Management Program. Additional access across adjacent private property may be pursued through negotiation, the Block Management Program, and/or purchase of a permanent right-of-way easement.



(2) Current harvest and potential harvest:

The JRWMA and the proposal property is in Hunting District 420, which currently allows elk hunting by permit only. However, the majority of the Judith River elk herd is hunted under the any antlered bull regulation; antlerless permits; and either sex provisions in the adjacent Hunting Districts 418, 432, 448, and 454. They make up that portion of Region 4 in the Little Belt Mountains, east of U.S. Highway 89. Studies of marked elk have documented some Judith River elk movement to hunting districts much further from the winter range area; e.g., the west Little Belt, Castle, Big Belt, Crazy, and Bridger mountain ranges.

Harvest data for that portion of the Little Belt Mountains east of U.S. Highway 89 (HD's 418, 420, 432, 448, and 454) indicates the current annual harvest (1996 data) at approximately 850 elk with 27,200 hunter days afield. A portion of this harvest data is contributed by 3 lesser wintering elk herds not associated with the Judith herd. The additional big game habitat provided by the property will increase the winter carrying capacity for elk on the JRWMA. This will help ensure the maintenance of the upper Judith River herd into the future. Increased opportunity for deer, pronghorn, and bird hunting will contribute up to 150 hunter days each year.

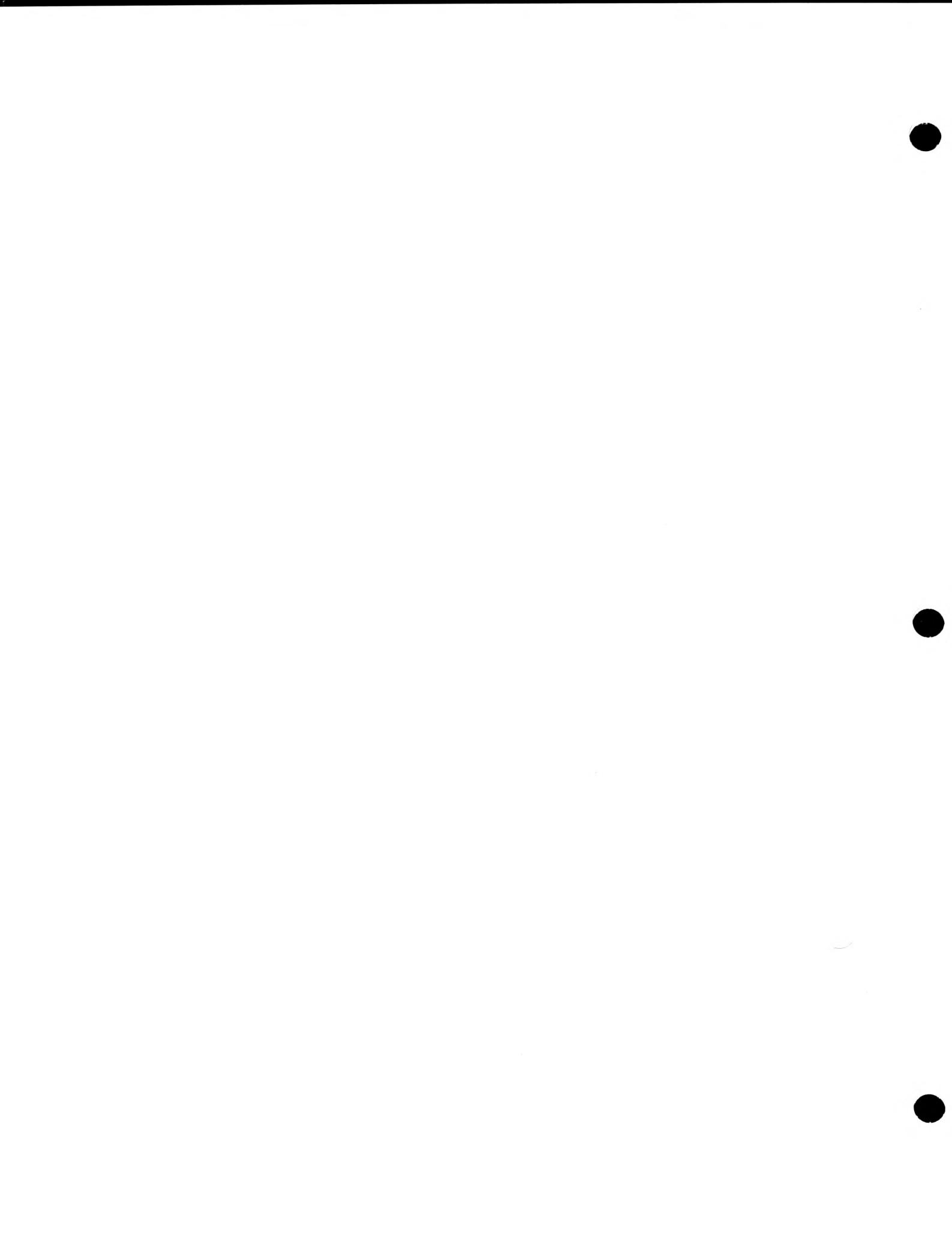
**Contribute to non-hunting recreation:**

(1) Hiking, horseback riding, bird watching, wildlife observation, antler and flower picking, and rock hounding will be available to the general public from May 15 through December 1.

(2) Recreation days provided: 400 days annually.

**Protect open space and scenic areas:**

(1) Vegetation and topographic features provide diverse and unique examples of native habitats greatly threatened by homesite and recreation subdivision. High quality wildlife winter range habitat on and adjacent to the JRWMA attract 150-250 deer, 50-75 pronghorn, and 800-1,100 elk; plus an ever increasing desire by humans to live nearby. The adjacent Sapphire Village subdivision already exists and occupancy is expanding. Expansion is limited only by availability of property, not a lack of interested buyers.

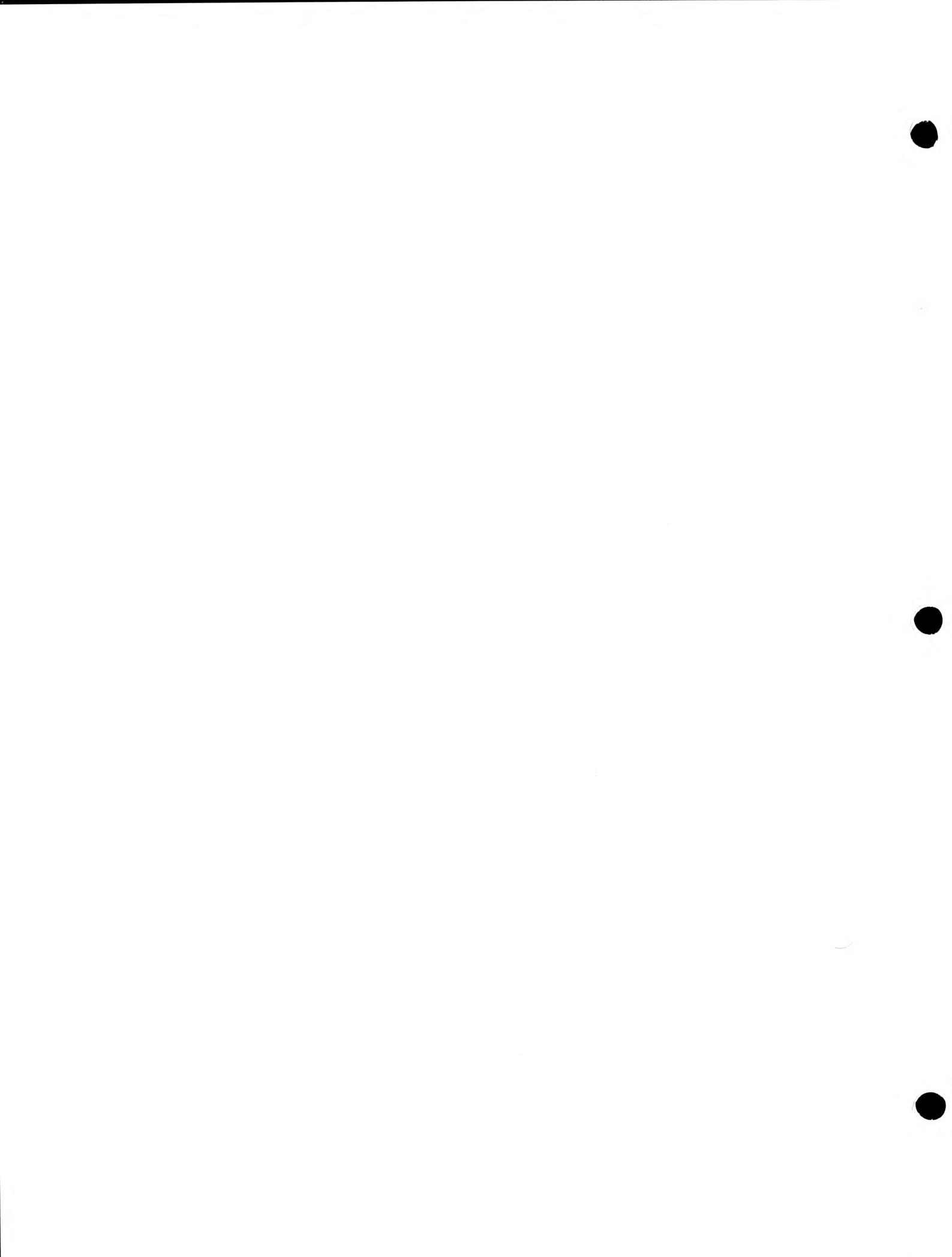


**Maintain local tax base, while demonstrating productive wildlife habitat is compatible with agriculture and other land uses:**

- (1) Since historic land use has been limited to livestock grazing, change in tax dollars to Judith Basin County from that source will be minor. The present owners use the property as summer range for approximately 175 cow/calf pairs (700 AUMs). Any loss in tax revenue currently generated by livestock tax should be more than offset by increases to the local economy and tax base created by heightened recreational opportunity and activity as a result of enhancement of the Judith River area wildlife habitat resource.
- (2) The wildlife habitat objective for the property will be to increase the carrying capacity for wintering big game, primarily elk. Spring/summer livestock grazing, prescribed burning, and other vegetative management practices (e.g., chemical fallowing, interseeding, logging, etc.) will be used to treat the vegetation when it is necessary to enhance wildlife habitat. Livestock grazing will supplement the local agriculture economy.

**Other Management Implications:**

- (1) The subject land is currently managed for annual summer/fall livestock grazing, as are adjacent and/or nearby privately owned lands. Grazing systems are generally continuous and season-long; however, several operators have developed rest rotation or deferred grazing programs. If the Department uses livestock grazing for vegetation management, the system will be designed to improve forage production and palatability for wildlife. Emphasis will be placed on attracting elk during the spring green-up period to reduce elk use of adjacent private lands.
- (2) No increase in Department manpower needs is expected relative to the addition and management of the proposal area. Given the inholding nature of the proposal, some management functions (e.g., fencing and road maintenance) will be streamlined and made more cost effective. Weed control/management activities in the JRWMA and Dipping Vat Coulee area will also be enhanced with the addition of the subject property.



## VI. PHYSICAL ENVIRONMENTAL IMPACT CHECKLIST

ITEM	POTENTIAL IMPACTS ON PHYSICAL ENVIRONMENT					COMMENTS ON ATTACHED PAGES
	MAJOR	MOD.	MINOR	NONE	UNK.	
TERRESTRIAL & AQUATIC LIFE & HABITATS	X					X
WATER QUALITY, QUANTITY, & DISTRIBUTION	X					X
GEOLOGY & SOIL QUALITY, STABILITY, & MOISTURE	X					X
VEGETATION COVER, QUALITY, & QUANTITY	X					X
AESTHETICS	X					X
AIR QUALITY			X			
DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, & ENERGY			X			

## VII. EXPLANATION OF IMPACTS TO THE PHYSICAL ENVIRONMENT

### TERRESTRIAL & AQUATIC LIFE AND HABITATS

Positive and major impacts to elk, mule deer, pronghorn, upland game bird, native species habitats, and aquatic habitats will occur as a result of management emphasis directed to improve vegetation communities for the benefit of major big game wildlife species.

### WATER QUALITY, QUANTITY, AND DISTRIBUTION

Water quality and quantity will greatly improve with controlled livestock grazing. Physical protection of the reservoir and live stream areas will be implemented as needed.

### GEOLOGY AND SOIL QUALITY, STABILITY, AND MOISTURE

Major and positive impacts to soil conditions will occur due to significant reduction in forage utilization and trampling by livestock during the summer/fall period, especially around watering sites. Improved amounts of residual vegetation over the entire area will improve soil fertility, quality, stability, and moisture content.



## VEGETATION COVER, QUALITY, AND QUANTITY

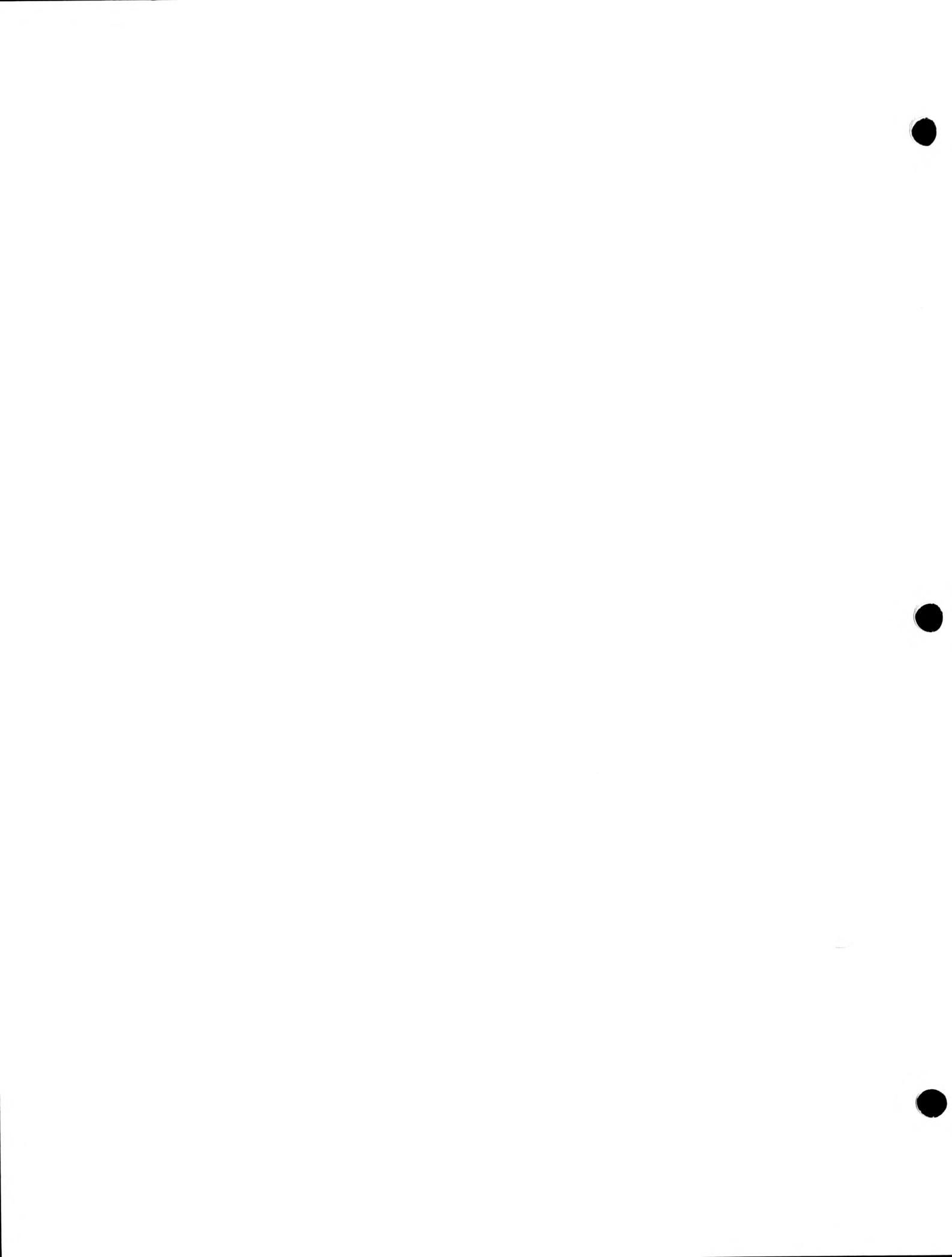
Reduction in summer/fall livestock grazing will greatly increase forage production, improve plant species composition and soil coverage. The major usage of vegetation will occur during the winter period by elk. Cattle grazing, prescribed burning, and other vegetative treatments will be used when appropriate to increase palatability of vegetation for big game.

## AESTHETICS

Significant improvement of the visual quality in the area will occur as a result of improved vegetative composition, quantity, and quality.

## VIII. HUMAN ENVIRONMENTAL CHECKLIST

POTENTIAL IMPACTS ON HUMAN ENVIRONMENT						
	MAJOR	MOD.	MINOR	NONE	UNK.	COMMENTS ON ATTACHED PAGES
SOCIAL STRUCTURES AND MORES				X		
CULTURAL UNIQUENESS AND DIVERSITY				X		
LOCAL AND STATE TAX BASE AND TAX REVENUE		X				X
AGRICULTURAL OR INDUSTRIAL PRODUCTION			X			X
HUMAN HEALTH				X		
ACCESS TO & QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES			X			X
QUANTITY AND DISTRIBUTION OF EMPLOYMENT				X		
DISTRIBUTION & DENSITY OF POPULATION AND HOUSING				X		
DEMANDS FOR ENERGY				X		
LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS				X		
TRANSPORTATION NETWORKS AND TRAFFIC FLOWS				X		



## **IX. EXPLANATION OF IMPACTS TO THE HUMAN ENVIRONMENT**

(Please refer to the attached Socio-Economic Assessment for additional analysis of impacts on the human environment.)

### **LOCAL AND STATE TAX BASE AND TAX REVENUE**

The Department of Fish, Wildlife & Parks will make annual in-lieu-of payments to Judith Basin County in an amount equal to the normal level of property taxes for the project area. There are no cultivated croplands or taxable building improvements on the property. A slight reduction in taxes relative to the livestock production may occur. However, the sellers have indicated they will not reduce their livestock numbers as a result of the sale, but rather compensate for the lost animals units with improved management of existing land or replacement of the disposed land with other land elsewhere. Additionally, it is the intent of MFWP to incorporate livestock grazing into the management of the project area when feasible and necessary. The addition of the project property to the JRWMA base will increase recreation opportunities, which will increase income to local merchants and businesses. This will create a positive effect on tax revenues.

### **AGRICULTURE OR INDUSTRIAL PRODUCTION**

Reduction in agriculture production will ultimately be limited to a slight reduction of livestock grazing. Depending on vegetation recovery and production, expected loss of livestock animal unit months could be 100-350 per year.

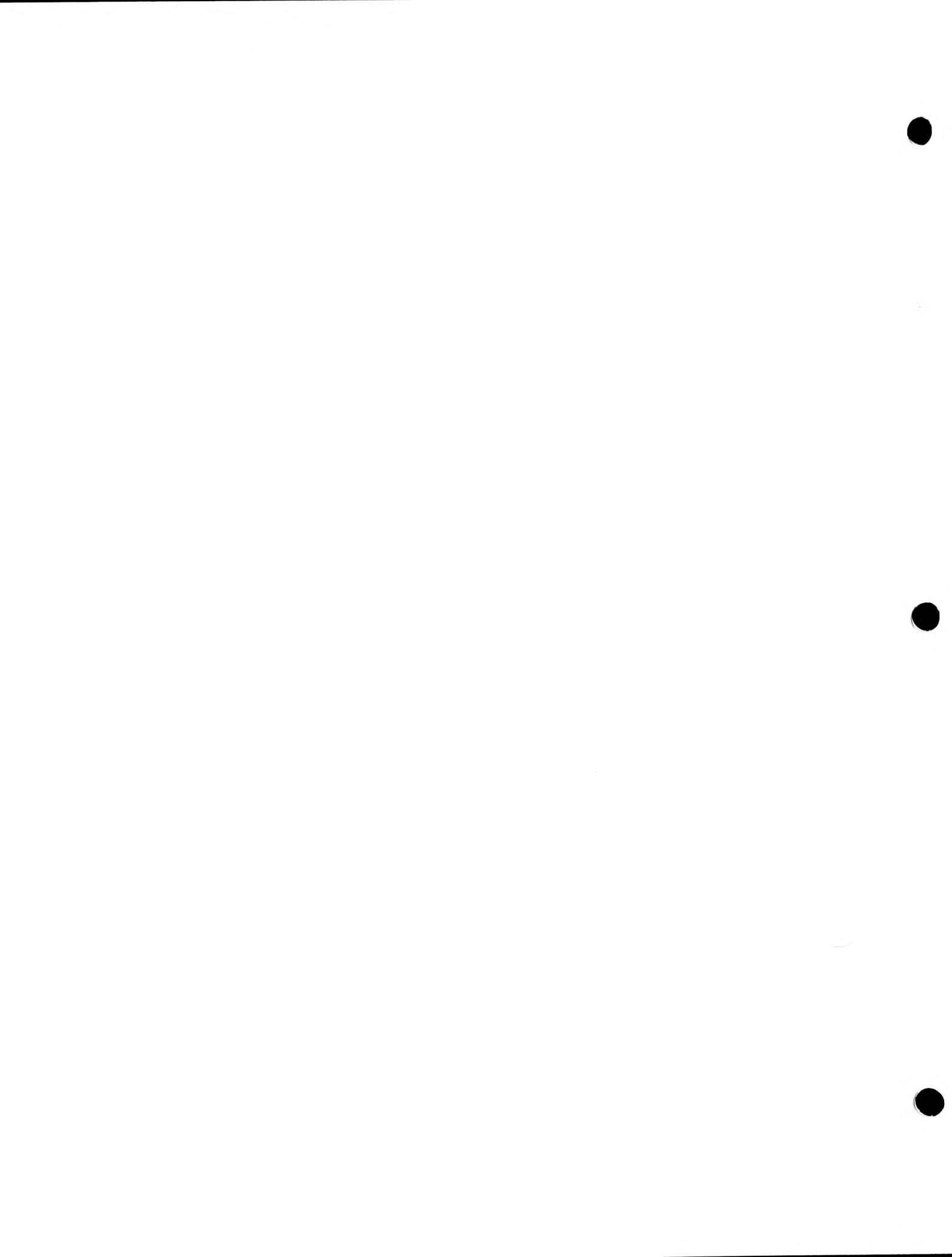
### **ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES**

Significantly improved recreational opportunities will occur as a result of public ownership of the project area.

## **X. DISCUSSION AND EVALUATION OF REASONABLE ALTERNATIVES**

### **1. No Action Alternative:**

The "No Action" alternative would not preserve the diversity of wildlife habitats in perpetuity. If the Department does not acquire the property, Hughes Livestock Company will likely consider other options for disposition of property, including either selling to another private party or subdividing portions of it. Residential development occurring nearby (Sapphire Village) could easily move onto the property. Important public access to both private and public lands would likely be lost along with critical wildlife habitat.



## **2. Fee Title Acquisition Alternative: (Preferred Alternative)**

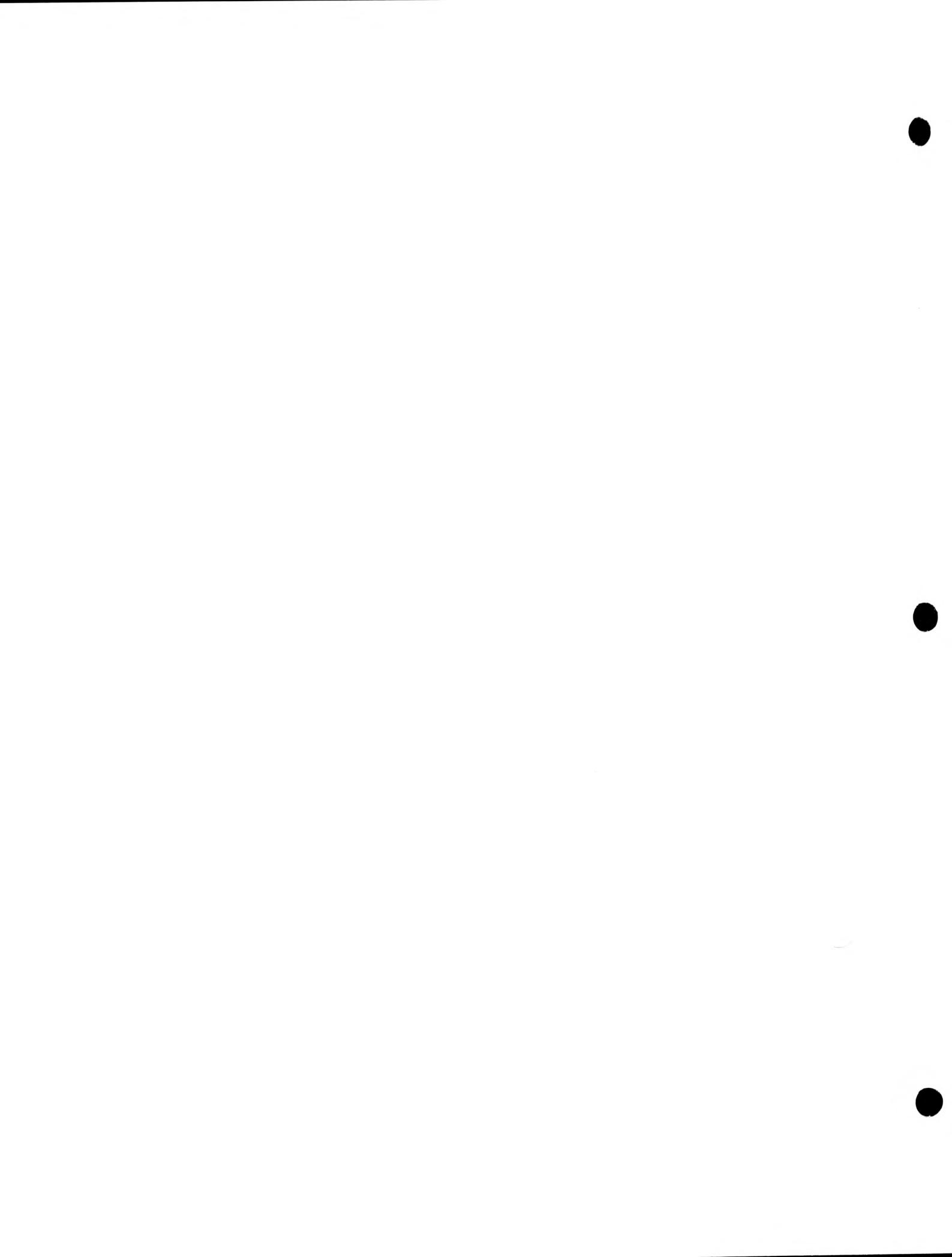
Hughes Livestock Company has offered sale as fee title. The alternative meets the Department objective to acquire ownership of the key winter range area for the upper Judith River wintering elk population.

## **3. Conservation Easement Alternative:**

A conservation easement was discussed, but rejected. The alternative was unacceptable because it did not address the desire of Hughes Livestock Company to consolidate their ranch holdings. The project area is a remote, isolated tract located approximately 8 miles distant from the main ranch holdings; consequently, proper management creates difficulty and added expense for the owners.

## **XI. EVALUATION OF NEED FOR AN EIS**

Based on the environmental assessment (EA), there will not be any significant negative impacts from the proposed action. Therefore, an environmental impact statement is not required and an EA is the appropriate level of review. The overall impact from the successful completion of the proposed action would provide substantial long term benefits to both the physical and human environment.



## **XII. PUBLIC INVOLVEMENT**

The public comment period will begin on 29 June 1999 and run through 11:59 pm on 29 July 1999. Written comment may be submitted to:

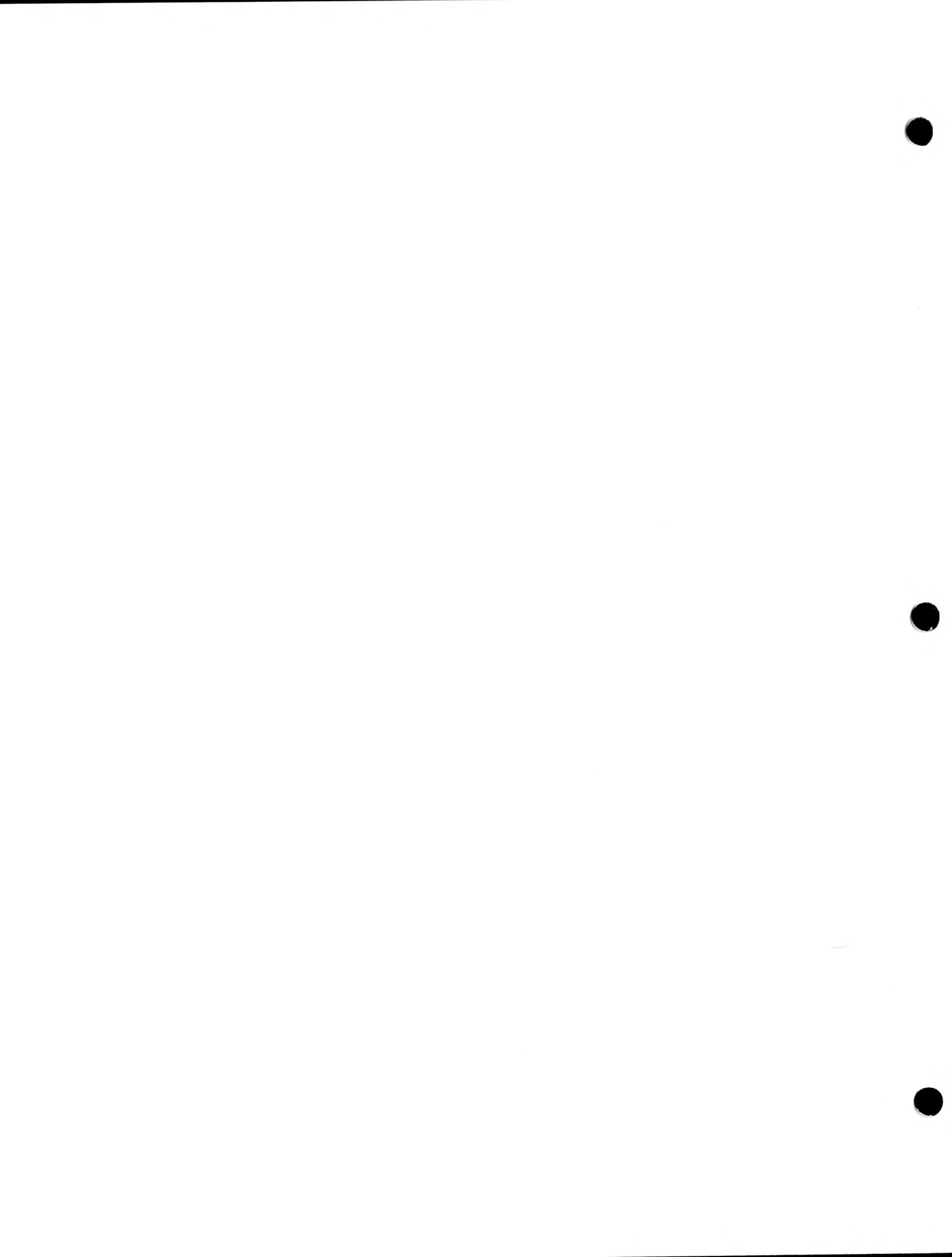
Montana Fish, Wildlife & Parks  
Attn: Hughes Livestock Co. Land Acquisition  
4600 Giant Springs Road  
Great Falls, Montana 59405

In addition, there will be a public hearing on Thursday, 22 July 1999 at City Hall in Stanford, Montana at 7:00 pm.

The proposed project has been discussed with adjacent landowners and the Judith Basin County Commission.

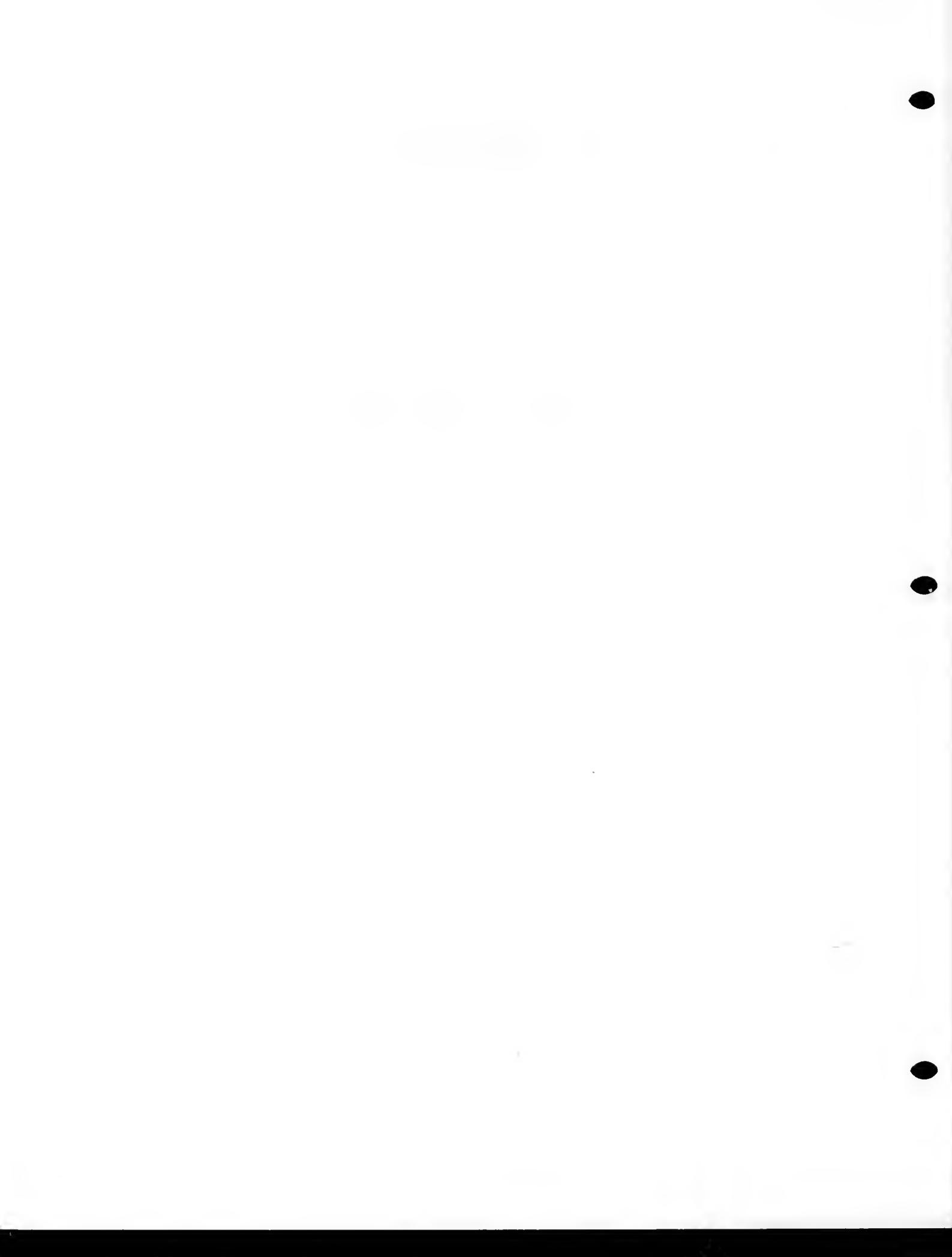
## **XIII. NAME, TITLE AND PHONE NUMBER OF PERSON RESPONSIBLE FOR PREPARING THIS EA**

Thomas Litchfield, Wildlife Biologist, Montana Fish, Wildlife & Parks, P.O. Box 532, White Sulphur Springs, Montana 59645, 547-3998.

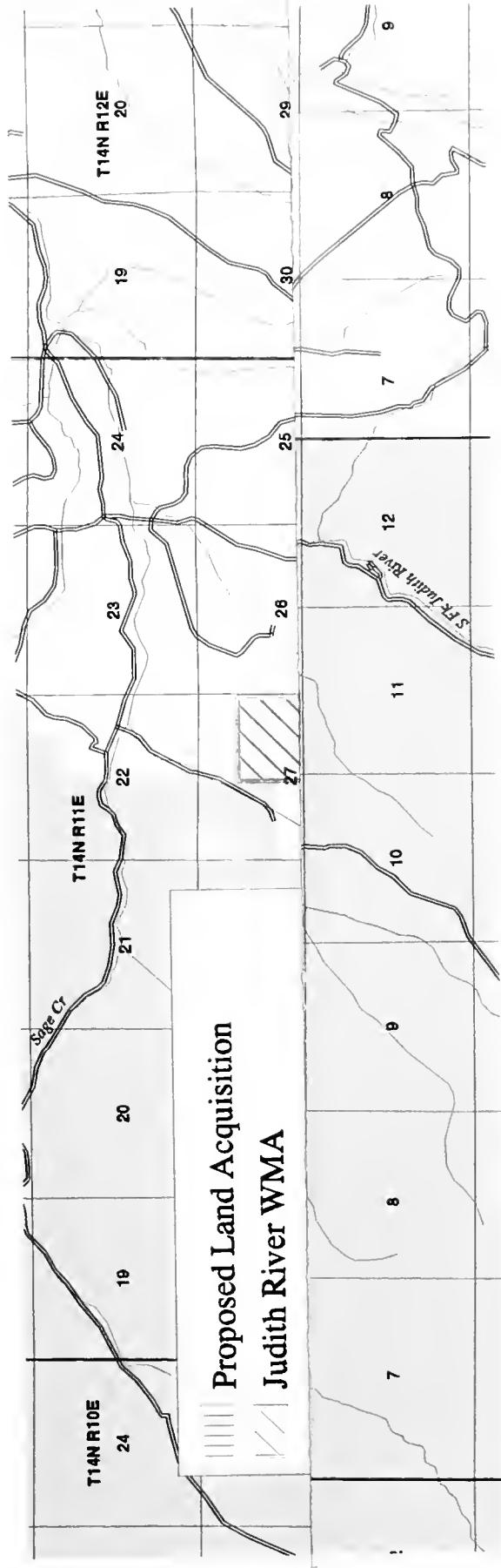


## **APPENDIX I**

### **PROJECT AREA MAP**



# PROPOSED LAND ACQUISITION JUDITH RIVER WMA



Map produced by:  
Lydia Bailey,  
Montana Fish, Wildlife & Parks  
Information Services Unit, Kalispell, MT. Wildlife Management Areas from  
Montana Fish, Wildlife & Parks, Information Services Unit, Kalispell, MT. Wildlife  
Management Areas digitized at 1:24,000 from USGS 7.5 minute quadrangle topographic  
maps and using the COGO module of ARCGENRO by Montana Fish, Wildlife & Parks,  
Kalispell, MT. Wildlife Management Area boundaries  
are accurate as of 07/01/98. Hydrography from Montana Fish, Wildlife & Parks,  
Information Services Unit, Kalispell, MT. Roads, cities, and Public Land Survey  
Information Services Unit, Natural Resource Information System, Montana State Library,  
Helena, MT. Cities, roads, and Public Land Survey System digitized at 1:100,000.  
Albers Equal Area Projection convergence true north to grid north -00°35'.

judith\_fia2.cmp - 06/25/99  
[/fwp/mtnet/projects/wma/judith\\_fia2.cmp](http://fwp.mt.gov/projects/wma/judith_fia2.cmp) - Lydia Bailey - 05/13/99

Proposed Judith River acquisition digitized at 1:100,000 by Montana Fish, Wildlife  
& Parks, Information Services Unit, Kalispell, MT. Wildlife Management Areas from  
Montana Fish, Wildlife & Parks, Information Services Unit, Kalispell, MT. Wildlife  
Management Areas digitized at 1:24,000 from USGS 7.5 minute quadrangle topographic  
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Information Services Unit, Natural Resource Information System, Montana State Library,  
Helena, MT. Cities, roads, and Public Land Survey System digitized at 1:100,000.  
Albers Equal Area Projection convergence true north to grid north -00°35'.

MONTANA

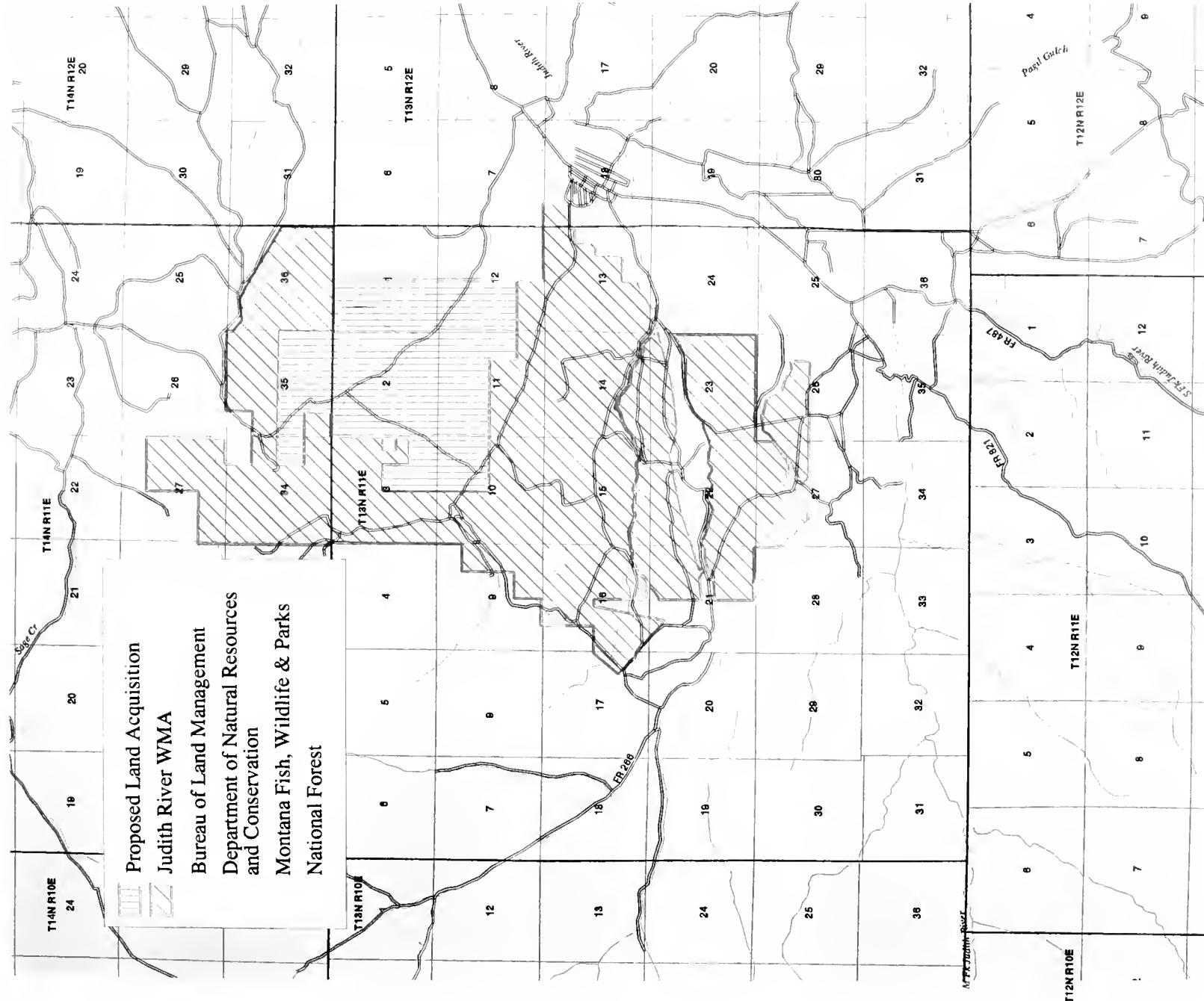


Montana Fish,  
Wildlife & Parks

MILES



# PROPOSED LAND ACQUISITION JUDITH RIVER WMA



Map produced by  
Lytic Bailey,  
Montana Fish, Wildlife & Parks  
Information Services Unit  
Kalispell, MT 59901  
406-751-4570

Judith River, cmp - 06/25/99  
[http://fwp.mt.gov/projects/judith\\_river.accd.html](http://fwp.mt.gov/projects/judith_river.accd.html)

Proposed Judith River acquisition digitized at 1:100,000 by Montana Fish, Wildlife & Parks  
Information Services Unit, Kalispell, MT. WMA boundaries are from  
Management Areas Unit, Kalispell, MT. Wildlife  
map and using the COGO module of ARC/INFO by Montana Fish, Wildlife & Parks.  
Information Services Unit, Kalispell, MT. Wildlife Management Areas boundaries  
are accurate as of 07/01/98. Hydrography from Montana Fish, Wildlife & Parks,  
Information Services Unit, Kalispell, MT. Roads, rivers, and Public Land Survey  
System from the Natural Resources Information System, Montana State Library,  
Helena, MT. Cities, roads, and Public Land Survey System, digitized at 1:100,000  
Albert Equal Area Projection convergence two tenth to grid north 000.55



Miles

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## APPENDIX II

The species listed below occur, or are thought to have the potential to occur, in the Dipping Vat Coulee area. This list is partially derived from a species list for the Lewis and Clark National Forest and JRWMA surveys. It has been adapted for habitats occurring on the property.

### Mammals

Common shrew  
Montane shrew  
Little brown myotis  
Long-eared myotis  
Long-legged myotis  
Small-footed myotis  
Big brown bat  
Hoary bat  
Silver-haired bat  
Townsend's big-eared bat  
Black bear  
Ermine  
Long-tailed weasel  
Mink  
Badger  
Red fox  
Coyote  
Mountain lion  
Bobcat  
Yellow-bellied marmot  
Richardson's ground squirrel  
Yellow-pine chipmunk  
Red squirrel  
Northern pocket gopher  
Deer mouse  
Bushy-tailed wood rat  
Meadow vole  
Gapper's red-backed vole  
Montane vole  
Western jumping mouse  
Grasshopper mouse  
Porcupine  
White-tailed jackrabbit  
Mountain cottontail  
Elk  
White-tailed deer  
Mule deer  
Moose  
Pronghorn

### Birds (incl. yearlong, migratory, and seasonal spp.)

Mallard  
Gadwall  
Blue-winged teal  
Cinnamon teal  
Northern shoveler  
American wigeon  
Turkey vulture  
Northern harrier  
Sharp-shinned hawk

Cooper's hawk  
Northern goshawk  
Swainson's hawk  
Red-tailed hawk  
Ferruginous hawk  
Rough-legged hawk  
Golden eagle  
American kestrel  
Merlin  
Prairie falcon  
Gray partridge  
Blue grouse  
Ruffed grouse  
Sharp-tailed grouse  
Killdeer  
Solitary sandpiper  
Long-billed curlew  
Rock dove  
Mourning dove  
Great horned owl  
Long-eared owl  
Northern pygmy-owl  
Short-eared owl  
Northern saw-whet owl  
Burrowing owl (potential)  
Common nighthawk  
Common poorwill  
Rufous hummingbird  
Belted kingfisher  
Lewis' woodpecker  
Yellow-bellied sapsucker  
Downy woodpecker  
Hairy woodpecker  
Northern flicker  
Western wood-peewee  
Hammond's flycatcher  
Dusky flycatcher  
Cordilleran flycatcher  
Say's phoebe  
Western kingbird  
Eastern kingbird  
Horned lark  
Tree swallow  
Violet-green swallow  
Cliff swallow  
Barn swallow  
Gray jay  
Steller's jay  
Pinyon jay  
Clark's nutcracker  
Black-billed magpie  
American crow  
Common raven  
Black-capped chickadee

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Mountain chickadee  
Red-breasted nuthatch  
White-breasted nuthatch  
Brown creeper  
Rock wren  
House wren  
Golden-crowned kinglet  
Ruby-crowned kinglet  
Mountain bluebird  
Townsend's solitaire  
Swainson's thrush  
Hermit thrush  
American robin  
Gray catbird  
Sprague's pipit  
Bohemian waxwing  
Cedar waxwing  
Northern shrike  
Loggerhead shrike  
European starling  
Warbling vireo  
Solitary vireo  
Yellow warbler  
Yellow-rumped warbler  
McGillivray's warbler  
Common yellowthroat  
Wilson's warbler  
Western tanager  
Lazuli bunting  
Spotted towhee  
American tree sparrow  
Chipping sparrow  
Clay-colored sparrow  
Brewer's sparrow  
Vesper sparrow  
Lark sparrow  
Savannah sparrow  
Grasshopper sparrow  
Fox sparrow  
Song sparrow  
White-crowned sparrow  
Dark-eyed junco  
Lapland longspur  
Snow bunting  
Red-winged blackbird  
Western meadowlark  
Brewer's blackbird  
Common grackle  
Brown-headed cowbird  
Rosy finch  
Cassin's finch  
House finch  
Red crossbill  
Common redpoll  
Pine siskin  
American goldfinch  
House sparrow

Amphibians

Tiger Salamander

Reptiles

Western terrestrial garter snake



## **PRELIMINARY WILDLIFE AREA MANAGEMENT PLAN**

### **HUGHES LIVESTOCK COMPANY PROPERTY, DIPPING VAT COULEE**

#### **INTRODUCTION**

The Wildlife Habitat Acquisition Act or House Bill 526 was originally passed in the 1987 legislative session. The Montana Fish, Wildlife & Parks Commission has adopted rules which provide for implementation of House Bill 526. Those rules specify that a Preliminary Management Plan must be written prior to any final action by the Commission. This Preliminary Management Plan is intended to give an immediate general analysis and provide the basis for public comment.

Comments which identify areas not addressed by the Preliminary Management Plan will be addressed in the final plan prepared by the Montana Department of Fish, Wildlife & Parks (MFWP). The preliminary plan identifies the Department's management goals for the property and does not contain specific work activities. These will be addressed in the final management plan when proper inventories have been made and compliance requirements met. The final Management Plan will be available for public review prior to approval by the Commission. Once the final Management Plan is in place, it will be reviewed periodically, and necessary adjustments incorporated.

The Hughes/Dipping Vat Coulee property will become part of the existing Judith River Wildlife Management Area (JRWMA). The current JRWMA is comprised of 7,696 acres of land owned and managed by MFWP. Consequently, MFWP management of wildlife, lands, and public use on the Hughes property will be in accordance with Department management programs that are currently in effect on the JRWMA. The final management plan for the property will be incorporated into a comprehensive management plan for the JRWMA. The Project Proposal identifying the need and importance of the acquisition is attached.

#### **AREA DESCRIPTION**

##### **Location and Physiographic Characteristics:**

The proposal area consists of a 2,143.13 acre inholding on the eastern edge of the JRWMA. The JRWMA is located adjacent to the east-central edge of the Little Belt Mountains and the Lewis and Clark National Forest in Judith Basin County; approximately 60 air miles southeast of Great Falls, 40 miles southwest of Lewistown, and 10 miles southwest of Utica (see map Appendix I, EA).

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Elevations range from 5,005 to 5,945 feet. The property is classified as a mountain foothill type consisting of gentle slopes, ridges, and benches, with both live and intermittent stream courses. Soils are generally light and shallow, underlain by a limestone matrix. Annual precipitation ranges from 12 to 18 inches, most of which falls from March through June. Snowfall is generally moderate and is accompanied by strong southwest winds. Chinook-type conditions are common during the winter period. The mean high and low temperatures are 52.8 and 23.1 degrees Fahrenheit, respectively. The average frost free period is 95 days.

Legal description of the proposed project property:

County: Judith Basin

Township 13 North; Range 11 East:

Section 1 = 317.99 acres  
Section 2 = 623.34 acres  
Section 3 = 120.00 acres  
Section 10 = 160.00 acres  
Section 11 = 360.00 acres  
Section 12 = 241.80 acres

Township 14 North; Range 11 East:

Section 34 = 40.00 acres  
Section 35 = 280.00 acres

Total Deeded = 2143.13 acres

The accompanying map (Appendix I, EA) displays ownership of all lands affected by the proposal, the project site, and property boundaries. The project's exterior boundary is 10 miles in length and is surrounded by approximately 8.25 miles or 82.5 percent of its total boundary by a portion of the JRWMA property. The project property is classified as an inholding in relation to the JRWMA. The remainder of the boundary is bordered by 2 adjacent ranch ownerships on the east side and a 10 acre privately owned subdivision tract on the west boundary.

Vegetation

Present

The proposal area is identified as Intermountain Grassland Habitat relative to the classification list of important Montana habitats. Vegetation types are quite diverse;

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consisting of mountain footslope grassland/timber, grassland benches, dry grassland drainage basins, and spring fed riparian/grassland drainages. The major portion of the property is open grassland type. Major grass species are Idaho and rough fescue; bluebunch, thickspike, and western wheatgrasses; and various bluegrass species. Shrub communities are relatively minor in occurrence and are dominated by shrubby cinquefoil, rose, and snowberry. Conifers are found in mostly small patches, 10-30 acres in size, consisting of ponderosa and limber pine on drier sites and Douglas fir on northern slopes of steep draws. One timbered area in the southwest corner of the property covers about 350 acres and serves as important winter thermal and hiding cover for big game animals. Approximately one mile of spring fed streams supply a ½ acre, man-made pond. Minor amounts of riparian type vegetation species are present along these streams.

From a wildlife perspective, the primary value of the property is critical winter/spring habitat for a significant portion of the Judith River elk herd. Secondary values include mule deer winter range, white-tailed deer and pronghorn yearlong habitat, black bear spring range, and upland bird habitat. These same vegetation types are utilized by a diverse group of small mammals, birds, and other wildlife.

The subject land is currently managed by its owners for summer/fall cattle grazing for 175 cow/calf pairs, plus several bulls . There are no cross fences; therefore, the 2,143.13 acres serves as one pasture. The grazing system has traditionally been continuous and season-long for about 4 months each year. Vegetative condition is fair to good, depending upon historic livestock grazing patterns. Areas near water sources are heavily utilized and are rated in fair condition. Vegetation condition improves significantly as distance increases away from water sources. Overall, approximately 50 percent of the vegetative condition, species composition, and general habitat is in good condition.

#### Future

The subject land's shrub, grass, and riparian vegetation are currently in need of improvement in species composition and plant vigor; therefore, the area will initially be rested from livestock grazing for a period of 2 or more years. At the end of the rest period, range conditions will be evaluated to determine if reestablishment of livestock grazing will benefit vegetation and wildlife cover/forage needs. Any future livestock grazing systems will be designed to further improve vegetative cover and forage production/palatability. MFWP has agreed to provide the Hughes Livestock Company the right to match the high bid for grazing for a period of 25 years from the date of closing. This right will be eligible to be exercised in instances where the subject property is advertised under a competitive bidding process. This right will not be transferable in the event that the Hughes Livestock Company sells the company or if the company ceases to be managed by the Hughes family or its heirs. It is projected that vegetative objectives will be reached by 2001.



Other vegetative treatments will also be considered and utilized. These treatments include, but are not limited to; interseeding, logging, chemical fallowing, hay cutting, prescribed burning, etc. Management emphasis will be placed on attracting elk during the spring green-up period to help alleviate big game use on adjacent landowners. The major use of the vegetation will be by elk during the winter period. Live stream and reservoir areas may require livestock proof fencing and water tank development to protect the riparian vegetation.

### **Travel System**

#### **Present**

Access to the property is by means of unimproved dirt roads through private land and also across the JRWMA. Internal roads are unimproved two-tracks.

#### **Future**

Motorized use will correspond to travel plan provisions for the JRWMA. These provisions allow for trail bike use on designated roads/trails from May 15 to October 15 (to access USFS land); no off-road/trail motorized use; motorized travel provisions for authorized MFWP personnel; and designated parking areas adjacent to the main county road through the JRWMA. If access arrangements can be successfully negotiated with adjacent private landowners, public motorized travel to a designated parking area will be established on the new property in the upper Dipping Vat Coulee area. Exact location of parking areas will be dictated by the type and location of the perimeter access. Negotiations for additional access will begin after the property is obtained. The rule that prohibits public access on all JRWMA lands, from December 1 to May 15, will apply to the acquisition property.

### **Physical Developments**

#### **Present**

Existing developments include external boundary fences, an abandoned homestead, several developed springs/water tanks, and 2 ponds. Fence conditions are poor to fair. Internal roads are unimproved two-tracks and may require erosion control structures.

#### **Future**

Fences will be replaced and/or repaired as needed. Additional interior fences may be constructed to accommodate a livestock grazing system. Additional water developments may be required to accommodate protection of the riparian and pond areas. The house will not be used or maintained and it may be left in its present

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condition, removed, or destroyed. The Dipping Vat Coulee pond will have the dam and spillway repaired and improved to maintain the integrity of that structure.

## **Wildlife**

### **Present**

Current wildlife use of the property includes the following species (and/or groups of species) and their present levels of use:

The primary species is elk, which occupy the area during the winter and spring periods of the year. These elk are the portion of the upper Judith River herd which utilize the JRWMA and adjacent private lands to the north and east. The population has been traditionally managed for 800-1100 counted animals, post-hunting season. The actual amount of elk usage on the property during a given winter is variable and dependent upon weather conditions and how severely the area was grazed by livestock during the previous summer/fall. Three to four hundred elk utilize the property during the spring green-up period. Mule deer may be found on the area yearlong, but numbers (50-75) are the greatest during the winter and spring periods. Approximately 50 pronghorn utilize the property on an intermittent yearlong basis. A small number of white-tailed deer use the area intermittently. Black bear and mountain lion make occasional use of the area. Blue and sharp-tailed grouse are common, but are in relatively low numbers. Furbearers present are coyote, badger, skunk, and bobcat. A variety of songbirds, raptors, and small mammals use the area in undetermined numbers on a seasonal and yearlong basis.

### **Future**

Upon acquisition, habitat management strategies directed towards improving the habitat for wildlife will result in an increased carrying capacity for big game and other wildlife species. Wildlife species that will benefit the most will be those adapted to utilize habitats with more vegetative cover and increased plant vigor. Also, predator species associated with prey that prefer such habitats will increase in number. Some wildlife species that are adapted to exploit heavily utilized habitats will decline.

## **AREA MANAGEMENT**

### **Management Goals**

The foremost goal for management of the Hughes property will be to maintain or improve the condition of all vegetative communities. Increased carrying capacities for wildlife, especially elk, will occur as vegetation conditions improve and adequate

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quantities of forage remain available during key seasonal periods (i.e., winter/spring). While focusing on elk, other big game species, small game, birds, and small mammals will benefit as well. A secondary goal will be to provide public access to these and adjacent public properties (BLM and USFS) for hunting and other recreational pursuits. A basic premise for management of the property will be to minimize all negative impacts to the land base. This implies minimal structure development and minimal maintenance requirements. The elk herd will be managed in concert with the existing agricultural and recreational values present in the surrounding area.

### **Objectives**

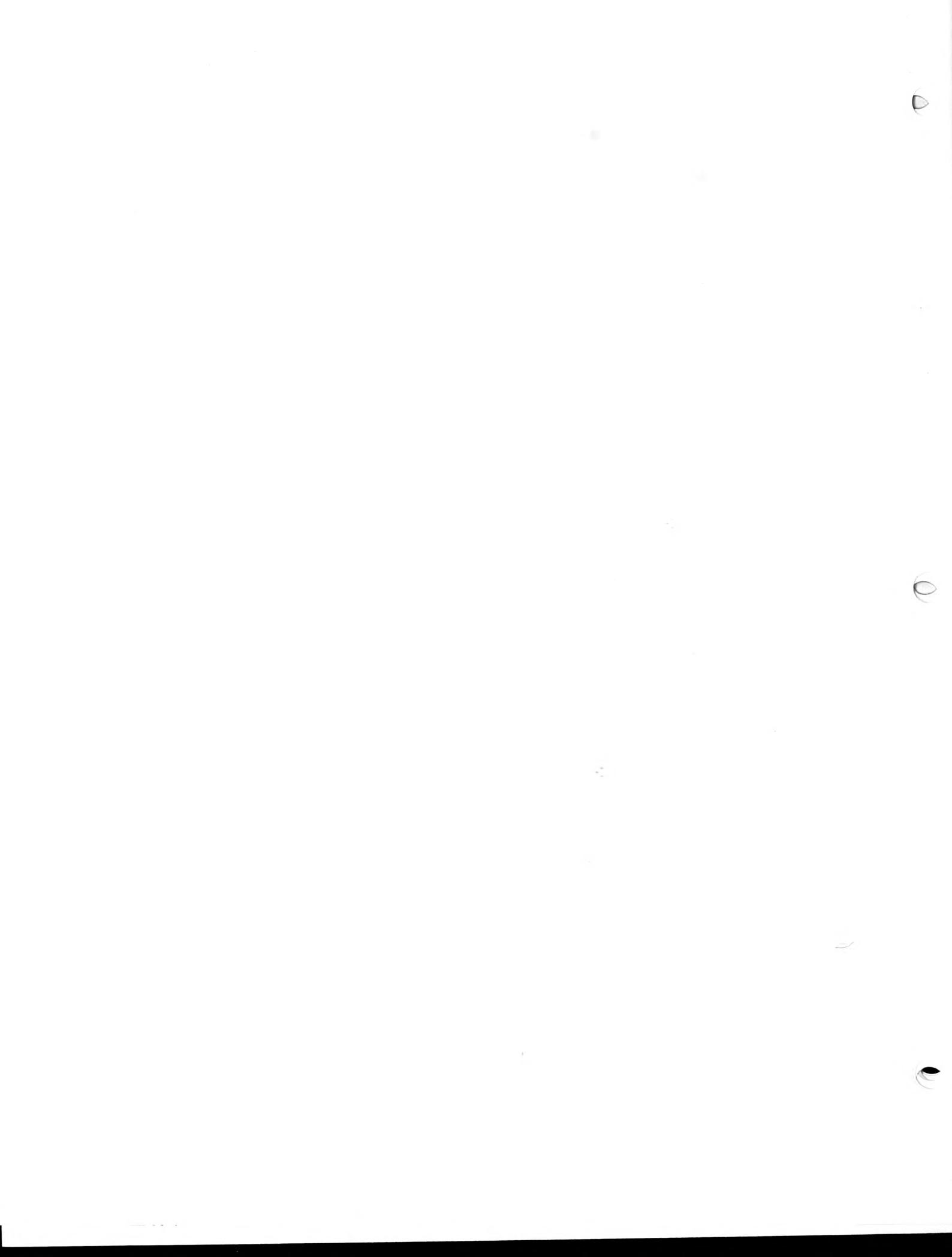
The most essential and important components of a wildlife management area are soil and vegetation. Every management action on the area will be aimed at maintaining or improving the vegetative condition and protecting soils. Vegetative treatments to improve habitat may include livestock grazing, total rest from livestock grazing, prescribed burning, mechanical treatment, and/or other common land management practices.

A change from present grazing practices to other grazing practices can be expected. This may include continuation of livestock grazing under a strict management scheme, such as a 3 pasture rest-rotation system. Initial efforts will focus on quantifying the condition and trend of existing vegetation and establishing long-term monitoring efforts on the property.

Prescribed burning as a tool to manipulate and stimulate grass communities may be utilized. Controlled burning may be used to remove conifer encroachment and to modify other plant successional stages. Any such effort would be made in coordination with adjacent landowners.

Mechanical treatment could include seeding a variety of native and tame grasses, but would be limited to previously disturbed or severely depleted sites.

Significant springtime elk use occurs on the Hughes property and will be perpetuated by the proposed acquisition. Ongoing vegetative treatments on the current JRWMA are expected to increase winter/spring elk usage on the WMA and, subsequently, reduce elk usage of adjacent privately owned lands. Mule deer and pronghorn usage of the property are expected to remain stable or increase slightly. Other wildlife numbers will fluctuate depending on their adaptations to the improvement in range and habitat conditions. All management objectives will be reviewed periodically and adjusted based on the availability of new information on wildlife use and movement, condition of the range, and impacts to adjacent lands.



MFWP will coordinate with adjacent landowners, both private and public, in developing land management plans. These may include, but are not limited to: a cooperative grazing system, developing land trades, conservation easements, and/or additional land purchases. MFWP will continue to concentrate on our block management and hunting access program with landowners adjacent to, or affected by, the acquisition and the JRWMA. Public entities such as the U.S. Forest Service, Bureau of Land Management, Montana Department Natural Resources and Conservation, and the Natural Resource Conservation Service will be consulted. MFWP will meet with the Judith Basin County Commission and adjacent private land owners as requested and needed.

MFWP will continue its aggressive approach to weed management on the JRWMA. Noxious weeds will be controlled as identified and in a manner consistent with MFWP's Region 4 Noxious Weed Management Plan. The Department will continue to coordinate with adjacent landowners and county weed boards for weed control.

An annual "in lieu of taxes" payment will be made by MFWP to Judith Basin County, in accordance with rates established for other landowners in the County.

Public use and access to the property will be managed consistent with MFWP's state and regional management objectives for WMA's. Recreation on the Hughes property and adjacent National Forest land is expected to increase. Elk harvest in the area is expected to increase. Deer, pronghorn, and game bird harvest will likely remain stable. Access objectives include public use of the area consistent with resource protection goals (i.e., vegetation patterns and soil stability). A winter use closure to all unauthorized activities will be implemented. This seasonal closure is designed to address wildlife cover, security, and forage needs; and to prevent human disturbance. This is consistent with a seasonal closure policy in effect on all wildlife management areas within MFWP's Region 4. Other regulations as they specifically relate to this and other WMA's will also apply. These include a closure to all mountain lion hunting and restrictions on fur trapping activities.

### **Impacts**

The stated changes in management direction for the Hughes property and adjustments to some land use practices will benefit much of the wildlife species currently using the area. Improving habitat quality will reduce the potential for future elk use problems on adjacent private lands. Should game depredation occur, one or more of the following methods will be implemented: fencing, scareguns, panels for haystacks, materials to

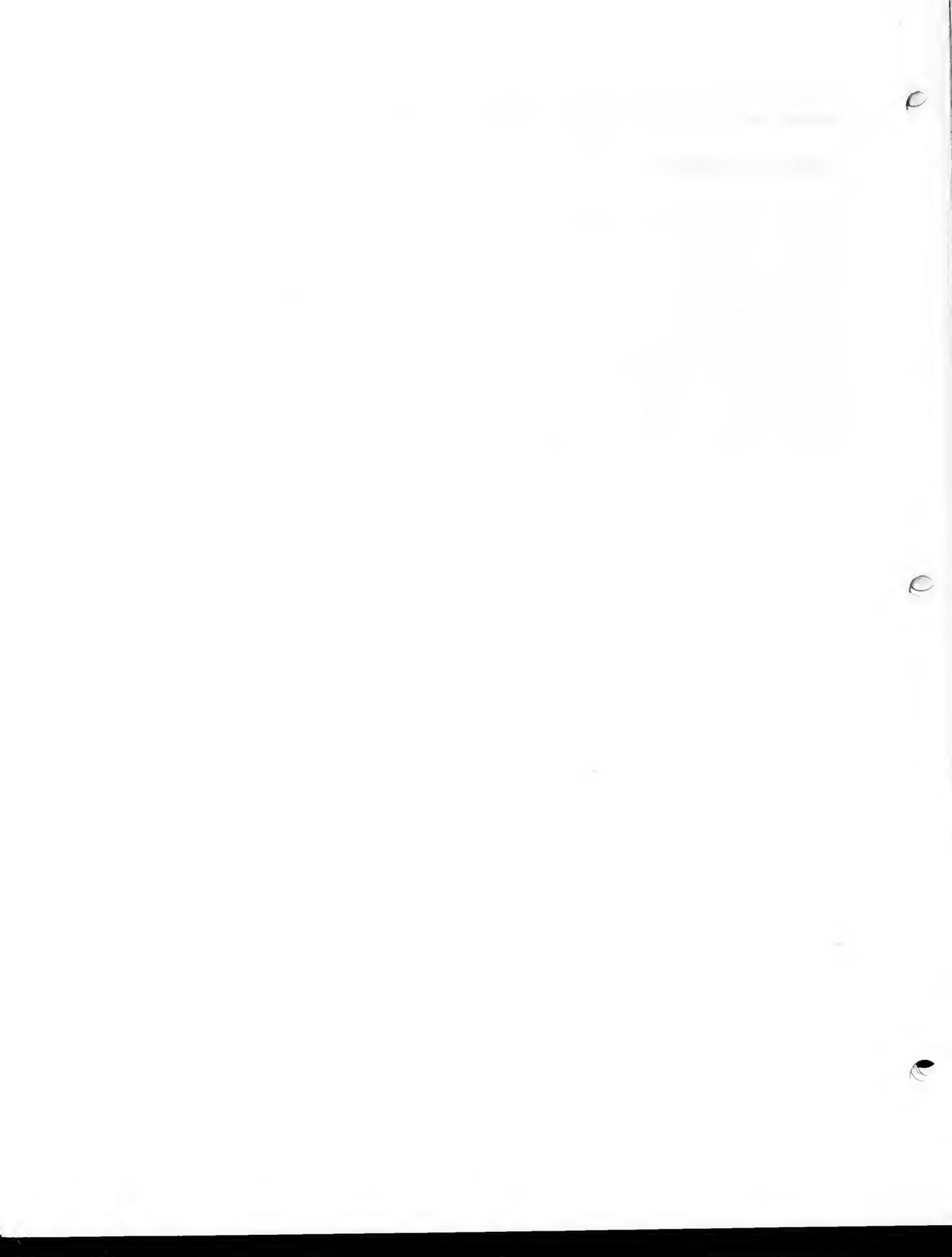
build permanent stackyards, kill permits, and special hunting seasons. A combination of the above methods would be used as necessary to resolve problems which might occur.



Public use of the property will be guaranteed during the hunting season according to management goals for the area. Use will be consistent with established travel patterns.

### **Management Activities**

Aerial and ground surveys and inventories of wildlife use of the area will be conducted. The area will be used on occasion for capturing and individually marking elk and other wildlife as research needs arise. Changes in numbers and patterns of use by elk and other big game species will be documented. Vegetation monitoring will be conducted on a regular basis. Other land management specialists and agencies will be contacted as needed for technical assistance in order to implement actions specified under management plans for the area. Within the scope of wildlife population and habitat objectives, physical developments will be evaluated. Historic and cultural values and a final management plan will dictate the extent of physical development and activity. Entrance and boundary signs will be erected to facilitate public use and to inform the public of the benefits and opportunities in the area.



**DRAFT**

**HUGHES LIVESTOCK COMPANY/  
DIPPING VAT COULEE FEE TITLE PURCHASE  
SOCIO-ECONOMIC ASSESSMENT**

**MONTANA FISH, WILDLIFE AND PARKS**

Prepared by:  
Rob Brooks  
May, 1999

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## I. INTRODUCTION

House Bill 526, passed by the 1987 Legislature (MCA 87-1-241 and MCA 87-1-242), authorizes Montana Fish, Wildlife and Parks (MFWP) to acquire an interest in land for the purpose of protecting and improving wildlife habitat. These acquisitions can be through fee title, conservation easements, or leasing. In 1989, the Montana legislature passed House Bill 720 requiring that a socioeconomic assessment be completed when wildlife habitat is acquired using Habitat Montana monies. These assessments evaluate the significant social and economic impacts of the purchase on local governments, employment, schools, and impacts on local businesses.

This socioeconomic evaluation addresses the fee title purchase of land presently owned by Hughes Livestock Company. The report addresses the physical and institutional setting as well as the social and economic impacts associated with the proposed fee title purchase.

## II. PHYSICAL AND INSTITUTIONAL SETTING

### A. Property Description

The property is located about 60 air miles southeast of Great Falls, Mt. and 10 miles southwest of Utica, Mt. adjacent to the Judith River Wildlife Management Area (JRWMA). This fee title purchase encompasses approximately 2143 acres in Judith Basin County. A detailed description of the property is included on page two of the environmental assessment (EA)

### B. Habitat and Wildlife Populations

This mountain foothill property is mainly open grasslands habitat with spring fed riparian/grassland drainages. There are no permanent streams on the property. The JRWMA and adjacent lands support a herd of 800 - 1100 elk, 150 - 250 mule deer along with pronghorn, white-tailed deer, black bear and mountain lions. A complete list of species that utilize these habitats is included in the Environmental Assessment, Appendix II.

### C. Current Use

This property is currently utilized by the Hughes Livestock Company as pasture. They run 175 cow/calf pairs and a few bulls during a four month long summer/fall grazing program each year.



#### D. Management Alternatives

- 1) Fee title purchase of the subject property by MFWP
- 2) No purchase

Alternative 1, fee title purchase of the property will help protect the integrity of the JRWMA by preserving the open space character of the WMA, allow MFWP to manage the subject lands as part of the JRWMA, and maintain the current level of public access to the property.

Alternative 2, the no purchase option, leaves this land at risk in terms of preserving its wildlife habitat value and providing public access. If MFWP does not purchase the subject property the possibility of subdivision may become a real threat given the location and access of the property.

### III. SOCIAL AND ECONOMIC IMPACTS

Section II identified the management alternatives this report addresses. Fee title purchase will provide long term protection of important wildlife habitat and winter range and a movement corridor between Reed Hill and the rest of the WMA, help to preserve the open space characteristics and integrity of the JRWMA, and provide for public access. Section III quantifies the social and economic consequences of the two management alternatives following two basic accounting stances: financial and local area impacts.

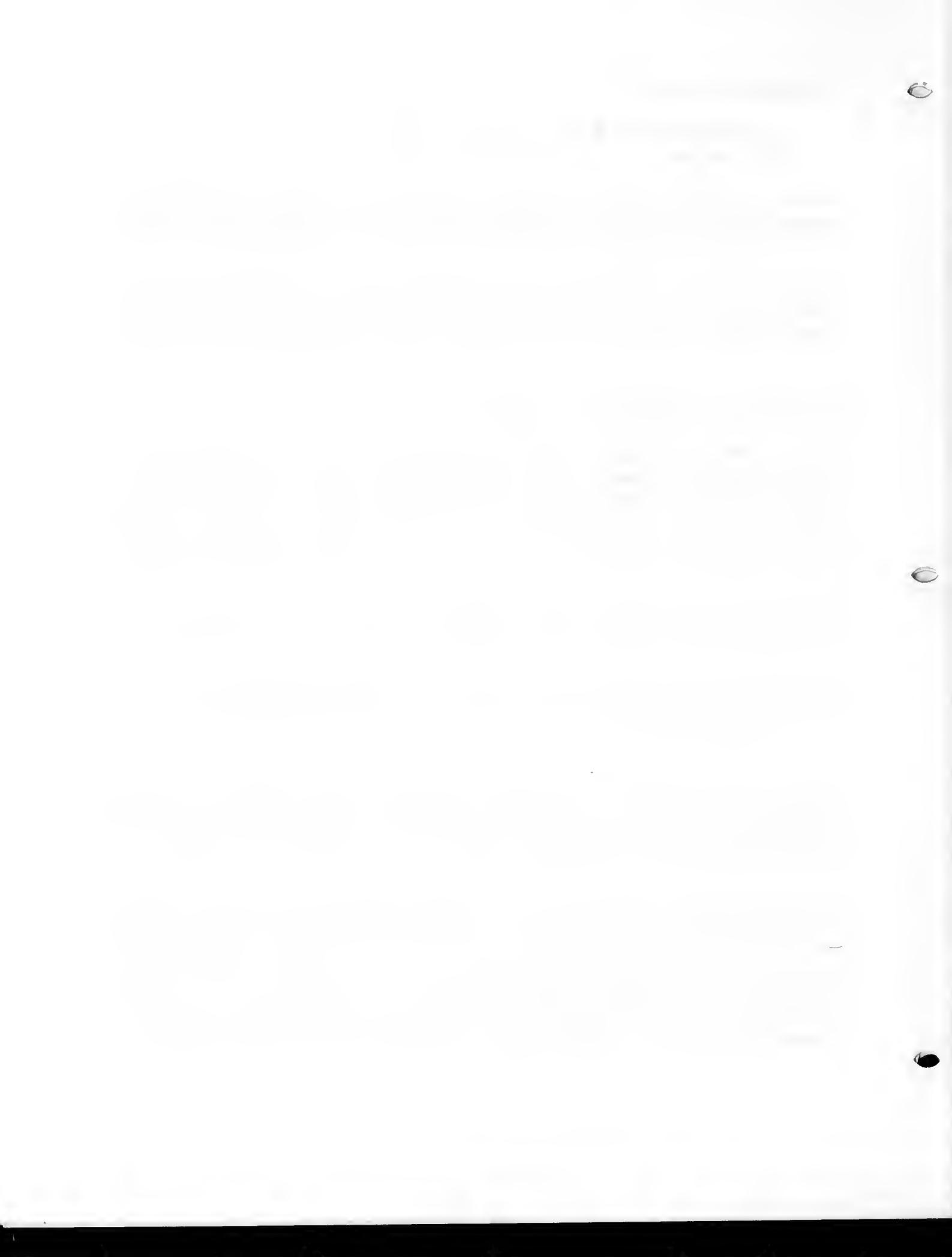
Financial impacts address the cost of the fee title purchase to MFWP and discuss the impacts on tax revenues to local government agencies including school districts.

Expenditure data associated with the use of the property provides information for analyzing the impacts these expenditures have on local businesses (i.e. income and employment).

#### A. Financial Impacts

The financial impacts on MFWP are related to the fee title purchase price and the maintenance/management costs. The Hughes Livestock Property will cost MFWP \$1,137,660.90. Maintenance/management costs related to the purchase are associated with weed control, fencing, travel management (roads, trails, signs) etc.

The financial impacts to local governments are the potential changes in tax revenues resulting from the fee title purchase. MCA 87-1-603 states that “the treasurer of each county in which the department owns any land shall describe the land, state the number of acres in each parcel, and request the drawing of a warrant to the county in a sum equal to the amount of taxes which would be payable on county assessment of the property were it taxable to a private citizen.” Montana Fish, Wildlife and Parks’ management plan for this property states that cattle grazing will be curtailed for a minimum of two years to allow for habitat improvement and longer if necessary.



Cattle grazing is part of the overall management plan for the JRWMA and will be considered in the future. The Hughes Livestock Company does not anticipate an overall reduction in cow/calf pairs due to this transaction. Personal property taxes associated with cattle should not change due to the fee title acquisition of this land by MFWP. There will be no significant changes in tax revenues to local governments including schools due to the purchase of this land by MFWP.

### B. Economic Impacts

The economic impacts associated with this purchase on local businesses are related to the Hughes Livestock Company's cattle operations and the hunting and wildlife viewing opportunities this property provides.

Since there is no anticipated change in the Hughes overall cattle operation the economic impacts to local businesses will be neutral.

According to the environmental assessment the addition of this land to the JRWMA will provide for 150 additional hunter days and 400 recreation days (bird watching, horseback riding, etc.) of use. It will also guarantee continued present use levels, as provided by an annual cooperative block management agreement between MFWP and the landowners. The expenditures associated with the hunting and recreational use will have a positive impact on local businesses. Resident hunters spend approximately \$50.00 per day on such things as gas, food, lodging and miscellaneous items and nonresident hunters spend about four to five times that amount. Wildlife viewers spend about \$70.00 per day on the same trip-related items.

## FINDINGS AND CONCLUSIONS

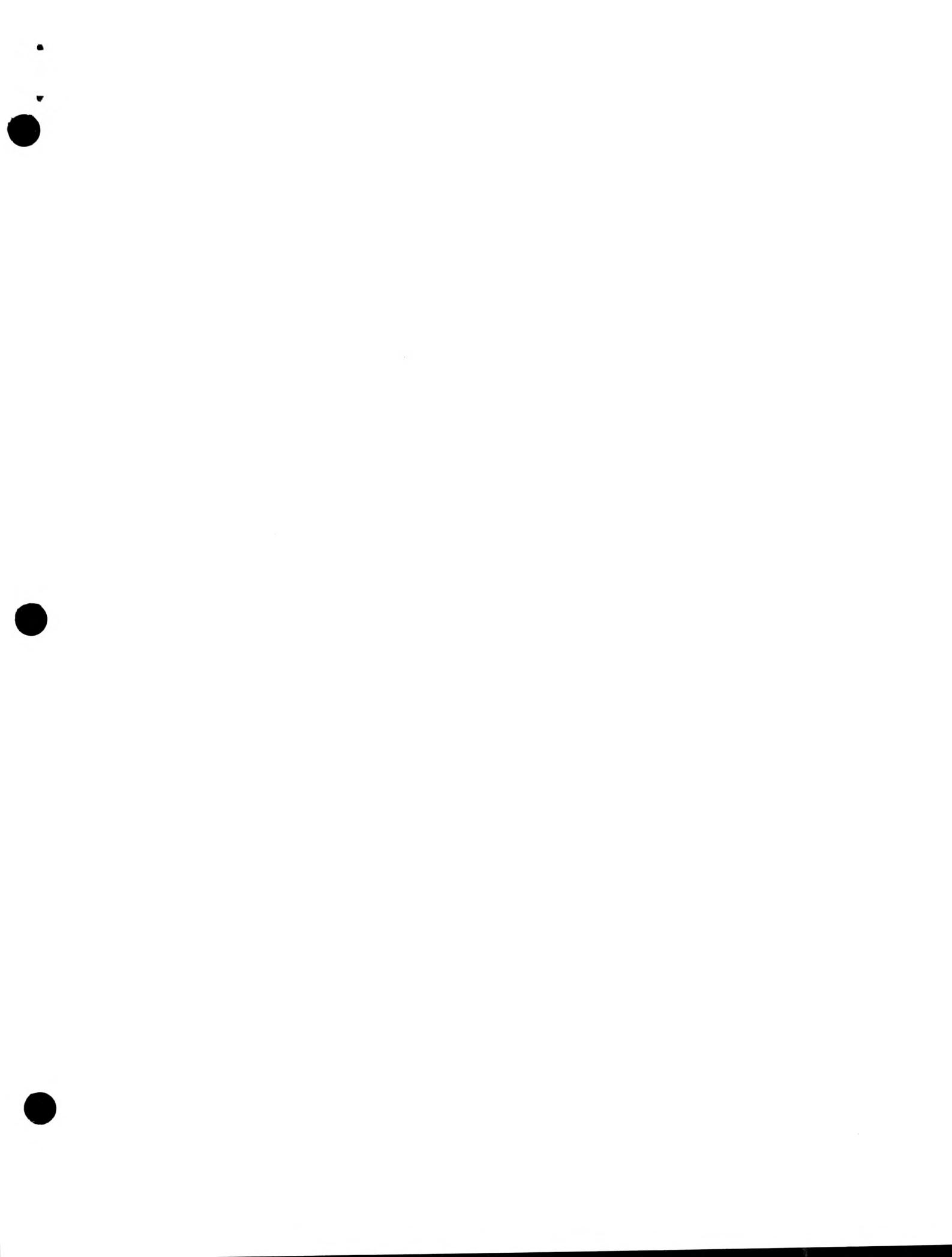
As noted at the beginning of this document, the Hughes Livestock property is located in Judith Basin County about 10 miles southwest of Utica, Mt.

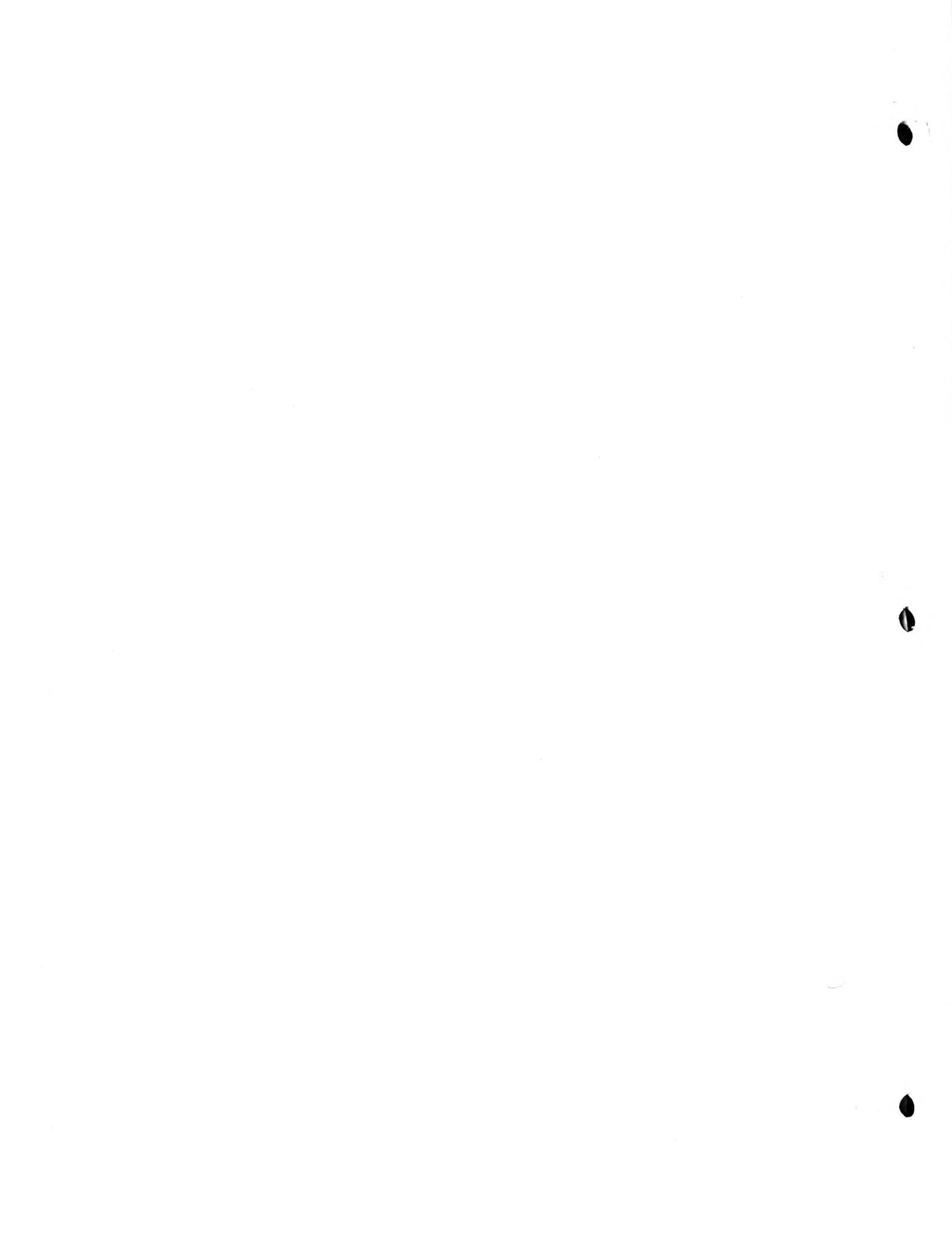
This fee title purchase will provide protection to the overall integrity of the Judith River Wildlife Management Area. The purchase will eliminate the concern about subdivision thereby preserving the open space characteristics of the JRWMA and maintain public access opportunities.

The fee title purchase by MFWP of the subject property will not have a significant affect on tax revenues collected by Judith Basin County from their current levels.

The economic impact to local businesses will be positive related to the recreational use estimated for this property. Expenditures by the Hughes Livestock Company are not expected to change so businesses in the retail sectors providing goods and services to the cattle operation will not be impacted. Those businesses providing goods and services to hunters and other recreational users using the Hughes property will see an increase in retail sales based on the increase in use projected by the environmental assessment.







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